



***Commonwealth of Massachusetts
Department of Public Utilities***

***Electric Industry Restructuring Plan:
Model Rules and Legislative Proposal
D.P.U. 96-100***

December 30, 1996

***"Reducing costs, over time,
for all consumers of electricity"***

***John B. Howe, Chairman
Janet Gail Besser, Commissioner***

EXECUTIVE SUMMARY

INTRODUCTION

On March 15, 1996, the Department of Public Utilities ("Department") issued a Notice of Inquiry/Rulemaking docketed as D.P.U. 96-100, opening the second phase of our investigation of the restructuring of the electric industry in Massachusetts. We are undertaking this effort to reduce costs, over time, for all consumers of electricity. Customer choice is the means by which this will happen. As suppliers compete to serve customers, they will become more efficient and more focused on providing the products and services consumers want, at a price they are willing to pay.

In the first phase, D.P.U. 95-30, the Department established a goal for the future electric industry and articulated principles to guide the development of, and transition to, a new industry structure. See D.P.U. 95-30, see also Appendix C. In initially undertaking this investigation, the Department recognized that the electric industry has entered an era of change where competitive forces were playing an increasing role, particularly in the generation sector. We acknowledged that the move from a regulated to a competitive industry usually leads to greater efficiencies and lower prices, with more and better choices for customers. The Department stated that "[r]educing costs, over time, for all consumers of electricity is the primary objective of the Department's efforts in restructuring the electric industry. The Department's overall goal ... is to develop an efficient industry structure and regulatory framework that minimize costs to consumers while maintaining safe and reliable electric service with minimum impact on the environment." D.P.U. 95-30, at 13.

CURRENT DEPARTMENT PROPOSAL

Today, December 30, 1996, the Department is issuing this document, which lays out our vision of a restructured electric industry that can deliver on the promise of lower costs and increased choices for consumers. We present a framework to ensure full and fair competition in generation, and redefine our regulatory approach in a market-based electric industry. We address the many issues that arise in the transition from the current regulated monopoly framework to a more competitive market-oriented structure, recognizing that a poorly managed transition has the potential to undermine the consumer benefits that a restructured industry would offer.

We acknowledge that we do not have the authority to implement all of the elements of the comprehensive framework that we lay out. Jurisdiction over the electric industry is shared between the federal government and the states, and within the state between public utility regulators and environmental regulators, among others, subject to authority granted by the Legislature. Therefore, this document includes a set of Model Rules designed to implement our proposed framework, a description of the positions that we will take on issues subject to federal jurisdiction, and a legislative proposal that supports this framework and provides us with the authority we need to move forward. In some cases, we seek clarification of our existing

authority; in others, we are seeking the additional authority needed to provide us with the ability to ensure both full and fair competition in generation markets, and continued reliability in transmission and distribution service, while still protecting consumers.

This document is divided into twelve Sections. The first Section presents an introduction to the Department's efforts in electric industry restructuring, and presents a rationale for the change to what will be a more efficient regulatory framework -- one that will reduce costs, over time, for consumers. Section II -- Residential Consumer Perspective, describes the opportunities that this restructuring effort will offer to consumers, and explains how consumers will perceive and be affected by the changes we are pursuing. The remaining Sections of the document address three broad issue areas.

The first broad issue area is market structure. Full and fair competition in generation with continued safety and reliability is critical for ensuring that consumers will receive the benefits of increased choice and lower costs that restructuring promises. Section III -- The Bulk Power System, Section IV -- Transmission Pricing, Section V -- Market Power, portions of Sections VI -- Distribution Services, Section VII -- Generation Suppliers, and portions of Section X -- Municipal Issues address market structure issues.

The second broad issue area covers public policy. The restructured electric industry must continue to deliver certain public policy benefits provided by electric companies today. Section VIII -- Environmental Issues and Section IX -- Alternative Energy Resources address public policy issues related to the environment and alternative energy resources (*i.e.*, renewables, energy efficiency, and distributed generation). Section VI -- Distribution Services provides for consumer protections and electric rate discounts for low-income consumers equivalent to those currently in place.

The third broad issue area is the transition to a restructured electric industry. Transition issues involve the shift in risks and costs that accompanies major changes in an industry. The difference between the embedded costs of generation incurred and currently being recovered from ratepayers under the regulated monopoly framework, and the market price that will be paid with competition, has come to be known as stranded costs. Recovery of these costs is a fundamental concern to the electric industry. Section XI -- Stranded Costs In the Transition Process addresses the stranded costs issue. Shifting responsibilities related to property taxes on utility generation and labor issues are addressed in Section XII -- Other Transition Issues, along with rate unbundling, which will provide electricity price information to consumers in a new way.

SUMMARY OF THE DOCUMENT

The document begins by describing the changes taking place in the industry from the consumer perspective. Section II -- Residential Consumer Perspective explains: that consumers will be able to choose among a variety of suppliers of electric generation service, including those who offer renewable energy; that consumers may choose to retain their current electric company

as a supplier, an option that will be called standard offer service and will be available for a five-year transition period; and that consumers who leave their current electric company and later return will pay spot market prices, an option called "default service." Distribution reliability will be equivalent to that experienced today because the distribution company will remain regulated; current billing and termination regulations will remain in effect for distribution companies and billing regulations will apply to competitive suppliers who bill directly; low income protections and discounts will continue; environmental issues will be addressed; and energy efficiency programs will still be available. Finally, we describe the Consumer Education Advisory Task Force that was established to advise us on providing consumers with timely, accurate and easy-to-understand information on electric industry restructuring.

The Department then begins to lay out the components of the market structure necessary to support full and fair competition in generation. In Section III -- The Bulk Power System, we provide an overview of how we expect the operation of this system -- including bulk generating facilities and high-voltage transmission facilities -- to adapt to a competitive market environment. We note the reliability benefits that the New England Power Pool ("NEPOOL") has provided and indicate our support for the continued close integration of the system under the control of a central regional transmission system operator. However, to ensure that the region's customers benefit from a reliable system that fosters vigorous competition without discrimination among generators on the basis of ownership, it is imperative that the central system operator be strictly independent from the economic interests of generators. We describe the types of reforms that we intend to pursue at the Federal Energy Regulatory Commission ("FERC"), which has jurisdiction over changes to the NEPOOL agreement.

To support a competitive generation market, there must be open access to transmission and comparable pricing that sends clear signals to promote efficient investment in and placement of power generation and transmission facilities. In Section IV -- Transmission Pricing, the Department notes that traditional methods of pricing transmission have not provided such clear price signals. We conclude that an efficient competitive electricity market requires a transition toward a transmission pricing method that is locationally sensitive. We present the rationale for our position, which we intend to pursue in relevant proceedings before the FERC, the regulatory body that has jurisdiction over transmission service in an unbundled environment.

With the infrastructure of the independent system operator and transmission pricing laid out, in Section V -- Market Power, the Department turns to the issue of market power directly. We discuss how we propose to prevent the exercise of undue market power in both its vertical (scope) and horizontal (size) dimensions to ensure that competition in the supply sector yields its promised benefits. We note our principle that generation, transmission and distribution must be at least functionally separated to facilitate effective competition, and our continuing view that the best means of addressing vertical market power, derived through the joint control of generation, transmission and/or distribution, is through the divestiture of generation. Alternatively, the independent transmission system operator described in Section III becomes indispensable, as does the establishment of a separate retail marketing affiliate and an effective code of conduct for

affiliated transactions, which is adopted by separate order coincident with this rulemaking. While horizontal market power, derived from excessive market concentration at one level in the chain of production, e.g., generation, does not appear to be a problem in New England at this time, we note that it is best addressed by guarding against the potentially anticompetitive effects of some mergers. We indicate that this consideration will be part of the Department's merger policy.

In Section VI -- Distribution Services, we step back from the underlying structure of the market to describe how the connection will be made from the competitive generation market to the customer. We note that distribution will remain a regulated monopoly. We will use our authority over distribution facilities of Massachusetts investor-owned utilities to ensure that current levels of reliability will be maintained. We will use this authority to administer consumer protections through billing regulations applied to distribution companies and competitive suppliers who bill directly and through termination regulations for distribution companies. We will also ensure the public policy goal of universal service through continuance of low-income discounts equivalent to those in place today.

Having made the connection at the distribution level, consumers will have a choice of three types of supplies in the new market structure: competitive supplies at a price disciplined by market forces; standard offer at a regulated price for a transition period; and default generation at the average spot market prices. Mentioned in Section II, these supply options are described in greater detail in Section VII -- Generation Suppliers. We also discuss consumer protections, including supplier registration and information disclosure requirements. Effective competition requires that consumers know what they are buying and from whom.

In Sections VIII and IX, the Department's focus shifts to public policy issues. In Section VIII -- Environmental Issues, we note the disproportionately large environmental impact of the electric generation sector and outline a strategy for ensuring that competition does not cause this impact to increase. We also state our reasons for optimism that, with effective coordination between environmental agencies and other jurisdictions, and with the enactment of equitable and competitively neutral environmental rules, restructuring has the potential to lead to significant environmental improvement. Such an outcome could result if new, cleaner, more efficient and less expensive generating sources are allowed to displace older, dirtier and less efficient facilities. Given our lack of direct jurisdiction, our strategy to ensure this outcome relies on a combination of efficient competition, consumer choice, environmentally benign resource options, and enhanced consumer information. We indicate our support for environmental regulators and our willingness to work with them at both the state and federal levels.

In Section IX -- Alternative Energy Resources, we reaffirm our commitment to ensuring that promising new energy technologies and approaches, including renewable energy, energy efficiency and distributed generation, have an opportunity to compete in the new electricity market. Not only will this provide more choices for consumers but it will also support our policy goal of reducing the environmental impacts of the electric industry. We propose a funding mechanism to provide financial support for renewable and emerging technologies; require the

continuation of utility demand-side management ("DSM") programs to address ongoing market failures and support the energy efficiency industry in the short term; and we recognize the possibility that distributed generation may represent a cost-effective means of addressing energy needs and supporting distribution systems. We therefore reaffirm and refine our policy of allowing net metering to enhance the likelihood that distributed generation will be implemented where and when appropriate.

In Section X -- Municipal Issues, we focus on three issues of particular importance to the Commonwealth's cities and towns. First, we reaffirm that our rules are not intended to apply to municipal light plants. We nevertheless encourage municipalities to participate in the competitive market and present statutory language for the Legislature's consideration that would codify the principle of reciprocity that we have advocated. Second, we reaffirm our support for the concept of municipal entities serving as load aggregators, noting certain advantages they may have in this role. We nevertheless caution that we do not support any form of involuntary aggregation imposed upon ultimate consumers, which would be inconsistent with our goals. Third, we address a transition issue -- the concerns often voiced by representatives of the 40 Massachusetts municipalities that host generating facilities that restructuring could lead to catastrophic loss of tax revenue. These communities fear that utilities' generating properties are likely to be devalued as a result of a decline in market value or reclassification to manufacturing status. We believe such concerns can be accommodated and recommend to the Legislature provisions to ensure that host communities are protected from substantial dislocation as a result of this process for a lengthy transition period. We note the difficulty of basing tax collection on property values in a competitive environment and suggest that, over time, the basis for taxation in the electric industry may need to change in order to ensure that tax policies do not lead to inefficient and anticompetitive results.

In Sections XI and XII, the Department turns to transition issues, noting the importance of resolving them to facilitate a smooth move to a restructured electric industry. In Section XI -- Stranded Costs in the Transition Process, we review our definition of stranded costs and assess arguments on the merits of allowing stranded cost recovery on both a legal and policy basis. We reaffirm our conclusion that, notwithstanding the fact that utilities have not demonstrated a clear legal entitlement to recovery, as a matter of sound public policy allowing electric companies a reasonable opportunity to recover stranded costs is in the public interest because such recovery would (1) ensure the provision of sound electric services during the transition to competition; (2) affirm reliability of commitments, which is an essential element in any future industry structure; (3) promote federal and state coordination and ensure equal treatment of similarly-situated utilities; and (4) avoid costly, reform-delaying litigation. In this Section, we address specifically the stranded cost claims revolving around purchased power contracts. This Section also describes how, mechanically, stranded costs should be calculated and collected.

In Section XII -- Other Transition Issues, we note that electric industry restructuring may lead to the displacement of workers from their existing electric company jobs and identify two options that could mitigate adverse effects. Electric companies and their employees could

negotiate a settlement of the outstanding labor issues; or the Legislature could mandate a set of transition and termination provisions. We encourage the appropriate entities to take action. Another transition issue relates to consumers' need for useful information to guide their decisions in the transition to a competitive market. To this end, the Department proposes to unbundle rates into their generation, transmission, and distribution components to provide consumers with transparent and accurate information regarding the price of electric services. In Appendix I, a Procedural Order directs all electric companies to file for review with the Department unbundled rates pursuant to the directives in Section XII by March 3, 1997, such rates to be established by the Department between April and June, 1997; and further directs all electric companies to file with the Department classifications of their distribution facilities based on an application of FERC's seven-part transmission/distribution test by March 3, 1997.

Finally, in Appendix A the Department offers our Model Rules to guide the restructured electric industry; and in Appendix B the Department offers Proposed Legislation for consideration by the Legislature that would provide the Department with the mandate to implement these rules. We note that the present statutory construct pursuant to Chapter 164 of the General Laws envisions a system of vertically-integrated electric companies that provide generation, transmission, and distribution services to defined service territories. Our proposal for a restructured electric industry that provides for customer choice of electricity supplier cannot be clearly implied from the existing legislation. Therefore an additional grant of authority from the Legislature is required in order to remove any uncertainty regarding the Department's authority to promulgate rules consistent with our restructuring proposal. We respectfully urge the Legislature to consider this proposed legislation in the upcoming session. We pledge our full cooperation in this effort and look forward to assisting the Legislature in pursuing the public interest by providing the citizens of Massachusetts with the freedom of choice of electric supplier and with the benefits of competition.

SECTION I - INTRODUCTION

A. Overview

This document culminates an effort, spanning almost two years, to determine how the Department of Public Utilities ("Department") can guide the restructuring of the electric industry to ensure that our goal of reducing costs, over time, for all consumers of electricity in Massachusetts will be realized. Electric Restructuring, D.P.U. 95-30, at 13. Our investigation has focused on how to make the transition from the regulated monopoly structure, which originated in the early 20th century, to a competitive market framework better suited to the economic and technological realities of the coming 21st century. We have also engaged in a reexamination of our own regulatory role in ensuring the development of a market framework that will deliver enhanced benefits to consumers in the form of lower costs, broader choice and increased efficiency. In this document, we present a description of our proposal for a restructured electric industry, Model Rules to guide the development and evaluation of individual electric company restructuring plans, and draft legislation that would enable us to enact these rules.

Under the Department's traditional monopoly regulatory framework, consumers have been restricted to a single electricity provider, typically a vertically-integrated utility engaged in generation, transmission and distribution of power. Under our proposal, this framework will evolve into a competitive market system featuring consumer choice among providers of generation services. Changes in generation technology over the past two decades offer the promise of significant efficiencies through competition among generation providers. The two wires-related functions -- transmission and distribution -- remain monopolies and thus subject to

regulation at the federal and state levels, to ensure that these services are offered on a low-cost, reliable and non-discriminatory basis.

After conducting this inquiry, we are confident that evolution toward a competitive market for generation, if implemented together with the safeguards described herein, will yield significant consumer benefits over time. This confidence is based not merely on theory, but on clear evidence of the transforming power of competition in other once-monopolistic industries. Over the past two decades, policy reforms have injected competitive pressure into markets for long-distance telecommunications, natural gas, and, in several foreign nations, electric power supply. Such reforms have resulted not only in lower costs to consumers, but also in speedier technological innovation and expanded service offerings that better meet customers' needs, as they see them, at prices they are willing to pay.

With this proposal, we now turn to the Legislature to lead a most important phase of this process: the enactment of legislation establishing statutory guidelines for restructuring the electric industry, and clarifying the Department's authority to enact the Model Rules included in this document as Appendix A. While certain of the Department's rules have been developed pursuant to our existing authority, many of the changes presented in this document require modifications to the Department's governing statute, G.L. c. 164, a statute that was first enacted in 1915 in a radically different industry environment. We stand ready to cooperate fully with the Legislature to achieve our goal of bringing the benefits of choice and competition to Massachusetts electricity consumers on January 1, 1998.

This introduction is structured as follows. It begins with a review of the historical origins and evolution of electric industry regulation. The next discussion addresses the relative benefits

and risks of a competitive market approach, compared to the traditional cost-of-service regulatory approach. Following a brief review of the regulatory and policy initiatives the Department has pursued over the past fifteen years to gain the benefits of competition in wholesale power markets for retail consumers, we recount in greater detail the origins and procedural history of the Department's two-year restructuring initiative. The introduction concludes with a brief discussion of the next steps in this process.

B. Historical Background

1. Origins of Monopoly Regulation

In contrast with the structure of the electric industry, the general rule in our nation's economy has been a preference for open, competitive markets providing choice and grounded in the principle of consumer sovereignty. The distinctive treatment of the electric industry was warranted by the peculiar realities of the industry in its infant stages. In the early 20th century, industry and political leaders recognized the importance of expanding the availability of electric service as quickly and cost-effectively as possible. The capital-intensive nature of the industry, however, hampered the prospects for orderly, market-based development. In certain areas, open competition among suppliers led to duplicative investment in poles, wires and generating equipment. More often, insufficient service was the rule. In short, the industry presented a classic illustration of the concept of natural monopoly.¹

¹ **A natural monopoly, in economic terms, is an industry in which high fixed costs cause the average cost for a single firm to fall over such an extended range that one firm can produce the total quantity sold at a lower average cost than could two or more firms. Paul Wonnacott & Ronald J. Wonnacott, Economics, at 457-458 (1979).**

Given this tendency toward monopolization, excessive prices and inadequate service, legislators and industry officials agreed that a system of economic regulation, with grants of franchises, represented an appropriate policy response. Franchisees, it was reasoned, could harness economies in two dimensions: economies of scale (a single entity could justify larger generating units yielding lower unit costs) and economies of scope (one entity, providing a variety of services on a vertically-integrated basis, could serve customers more economically if each of these services was shielded from competition).

Accordingly, legislatures in Massachusetts and elsewhere enacted statutory frameworks providing a system of rights and obligations for private, investor-owned electric companies. Franchisees gained an entitlement to serve all customers within a community, and protection from competition from entities not holding similar rights.² Among franchisees' obligations were the obligation to render service to all customers within the territory on a non-discriminatory basis, and to submit rates for legislative approval. In Massachusetts, the Legislature established the Department as its expert ratesetting arm. Legal standards governing this function evolved through case law, and under common formulations, public utilities commissions are required to establish rates at levels that allow companies a reasonable opportunity to recover their prudently-

² **As the Department has previously found, the case law on franchise rights in Massachusetts does not clearly demonstrate that franchise rights were intended by the Legislature to be exclusive in character. D.P.U. 95-30, at 40-43. Nevertheless, except for isolated instances, franchise holders operated on a monopoly basis.**

incurred investments and operating costs, plus a sufficient return on investment to enable them to attract necessary capital at reasonable cost.³

Proponents of monopoly regulation frankly acknowledged that this approach was a "second-best" alternative to market-based competition. It relied upon regulators' judgment in place of competitive market discipline; the resulting system was heavily oriented toward legal process; and its cost-plus orientation created perverse incentives for utilities to maintain and justify, rather than reduce, expense and investment levels. Nevertheless, given the fledgling industry's innate tendency toward market failure, regulation offered the best protection against monopoly abuses and the best assurance that necessary services would be provided at the lowest reasonable cost. Monopoly regulation and the franchise system proved successful in encouraging the widespread development of electric service. This system continued to work reasonably well as, through the 1960s, rates continued to drop and there was no significant pressure for change.

2. The Modern Era: Changing Circumstances

The industry's circumstances began to alter dramatically in the early 1970s, particularly with respect to generation and, to a lesser extent, transmission. The characteristics of local distribution to retail customers have not changed to a similar extent; however, the revolution in information systems and communications technology has raised the possibility of new forms of retail service. These changes are discussed in turn.

³ **Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944); Bluefield Water Works & Improvement Co. v. PSC, 262 U.S. 679, 692-693 (1923).**

The economics of power generation, after decades of increasing scale and decreasing costs, reached a point of exhaustion in the late 1960s with the construction of very large fossil-fuel plants, and experienced an abrupt reversal in the 1970s with the shift to nuclear technology. While this shift was undertaken in response to broad concerns about air pollution and fuel availability, further intensified by the 1973-74 oil crisis, the new wave of nuclear facilities proved to be more costly and complex than anticipated, requiring significantly longer lead times for construction, while often achieving low levels of reliability once in operation. The confluence of high costs, high interest rates, lengthy construction schedules and delays led to dramatic cost overruns. As a result of increased energy costs and slower economic growth, forecasted growth in electricity demand failed to materialize. This combination of factors caused strong pressure to increase consumers' rates.

Higher energy costs, in turn, provided a commercial opportunity for new forms of generation from non-utility providers. Congress recognized the necessity of promoting a more diverse range of energy resources and, through provisions contained in the Public Utility Regulatory Policies Act of 1978 ("PURPA"), mandated that electric utilities provide a market for the output of non-utility power plants that met certain fuel, ownership and efficiency standards. Pursuant to PURPA's "avoided cost" standard, the Federal Energy Regulatory Commission ("FERC") implemented rules requiring that electric companies purchase power from so-called Qualifying Facilities ("QFs") at rates reflecting the costs the electric companies would have incurred had they been required to produce or otherwise procure the same amount of power.⁴

⁴ **See, generally, 18 C.F.R. § 292. If a power generation project**
(continued...)

Avoided cost rates were established by state public utility commissions through a variety of means, including administrative proceedings and, later on, competitive bidding. In the wake of PURPA, a new independent power producer ("IPP") industry, competing for opportunities to sell power to electric companies at or below their avoided cost, matured in the space of little more than a decade. IPPs developed innovative technologies, ranging from waste-to-energy and renewable resources to highly efficient combined-cycle cogeneration applications fueled by natural gas, that were simpler, more efficient, and could be planned and constructed in a modular fashion with shorter lead times than traditional, large-scale utility plants. The emergence of a competitive QF industry helped to end any residual notion that electric power production was inherently a natural monopoly.

The role of bulk power transmission, as well, has changed substantially within the past three decades. In response to the Northeast Blackout of 1965, electric companies across New England joined in planning and constructing a transmission system to serve the region's needs, and crafted the New England Power Pool ("NEPOOL") Agreement, which became effective in 1971. These initiatives were intended to provide greater reliability, coordination, and reserve-sharing capabilities among local distribution utilities. The establishment of an integrated transmission grid also enhanced the opportunities for a competitive pattern of bulk power commerce.

⁴(...continued)

meets certain requirements set forth in 18 C.F.R. 292.203(a), it is characterized as a facility that qualifies for a specific regulatory treatment. 16 U.S.C. § 796(18)(B).

The potential implications of the transmission grid became evident following Congressional enactment of the Energy Policy Act of 1992 ("EPAAct"). Through EPAAct, Congress affirmed the FERC's authority to order utilities to provide transmission access to wholesale customers. FERC then articulated its open transmission access policies through a series of orders and rulemakings, culminating most recently in its May 10, 1996 Open Access Rule ("FERC Order 888").⁵ Pursuant to requirements in FERC Order 888, NEPOOL is obligated to file a plan to implement a single pool-wide form of pricing no later than December 31, 1996. Moreover, efforts to establish an independent regional transmission system operator ("ISO") to serve the NEPOOL market area have reached an advanced stage. These reforms promise to spur further the development of an open and competitive bulk power market in New England.

Congress, through EPAAct, established the goal of vigorous competition in supply at wholesale across the interconnected grid as a matter of national policy. FERC, through its various orders implementing open transmission access, has advanced this policy significantly over the past four years. Retail consumers, as a result, are now within effective reach of many potential sources of supply via this interconnected grid. However, consumers' access to the benefits of a competitive bulk power market is restricted by the continuation of a monopoly framework governing the availability of supply at the retail level.

⁵ **Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities and Recovery of Stranded Costs by Public Utilities and Transmitting Utilities, Order No. 888, 18 C.F.R. §§ 35 and 385 (1996).**

The local distribution of power to homes and businesses, typically along public streets and at lower voltages, has retained its essential monopoly character, and there continues to be wide acknowledgment of the need for regulation of this segment of the industry. Competition in distribution would require the construction of duplicative facilities that would be expensive, environmentally intrusive and potentially unsafe. While some claim that certain aspects of the distribution function could, in theory, be provided on a competitive basis, few dispute that within this function resides the core of the residual monopoly in electric service.

As industry participants have started planning operations in a competitive retail environment, many have come to recognize, in addition to and distinct from the physical generation, transmission and local distribution of power, a fourth functional area: retail services. Electric companies have traditionally provided billing services that require extensive metering, communications, and computing technology. In recent years, dramatic advances in the capabilities of these technologies, and precipitous drops in their costs, have spurred entirely new patterns of commerce and, in particular, differentiation and customization in various products and services. Under legal and ratemaking conventions, utilities have been required to treat individual customers as members of large ratepayer classes, subject to treatment on an equal and non-discriminatory basis. Treating customers on a more individual basis was precluded by the high cost of the metering and information systems required for such an approach. However, with the introduction of low-cost information systems and rapid communications, customization of products and services is a prevalent trend in all areas of our economy. Likewise, advocates of competition in retail electric services claim that customization in retail electric energy services

promises that the needs and preferences of individual customers may be met more efficiently and at lower costs than was heretofore possible.

This brief review of changes in the economics and technology of the electric industry indicates that the early 20th century assumptions underlying monopoly regulation no longer conform to the realities of the modern industry. Whereas the regulatory framework succeeded initially in fostering rapid development of the Commonwealth's electric infrastructure, it is not well suited to emerging changes in technology and market conditions.

Challenges to cost-of-service regulation have intensified in recent years as growing numbers of large industrial and commercial consumers, aware of new supply options available to them, have become unwilling to pay the costs assigned to them under the monopoly framework, and demanded relief from utilities. While larger customers' significant leverage has enabled them to succeed in obtaining discounts, smaller customers have found no relief from the high rates that have resulted from traditional cost-of-service regulation. Even though the Department has strictly prevented utilities from collecting lost revenues associated with large-customer discounts from their other, more captive customers, the mere existence of such discounts has generated a perception of unfairness. This tension over the perception that large customers have preferential opportunities for savings is a clear indicator that the existing regulatory framework has become unsustainable.

For the Department's regulatory framework to provide the greatest possible benefits for all electricity consumers, it must reflect the modern realities of the industry and the emerging marketplace it serves. Where competition is possible, as is clearly the case in generation markets, the regulatory framework should harness this force productively, and not thwart its operation.

Where regulation is still necessary, as remains the case with transmission and distribution, regulation should incorporate incentives for greater efficiency. While the focus of regulation will shift toward ensuring that customers have effective access to competitive options, the importance of ensuring suitable forms of consumer protection, and excellent service quality and reliability, is in no way diminished.

C. Competition: Benefits and Risks

1. The Benefits of Competition

Interest in replacing traditional regulatory approaches with a competitive retail electricity market in Massachusetts reflects a trend spanning several industries and jurisdictions. This trend, while founded in economic theory, is validated by the historical record of other industries in which regulators, faced with market and technological change, have embraced competition as a means of forcing down costs and spurring innovation. Some of the successes achieved through increased reliance on competitive market forces bear mention.

The long-distance telecommunications industry presents a prime illustration of the impact of introducing competition in a highly regulated industry. As new providers first entered this market as resellers and later developed competing facilities, pressure increased to unbundle long-distance service from local service and subject it to open competition. Following the breakup of the Bell System, average rates for long-distance service fell precipitously. By one estimate, rate decreases averaged 9.1 percent annually between 1983 and 1989.⁶ Meanwhile, during the same

⁶ **Robert Crandall, After the Breakup: US Telecommunications in a More Competitive Era (1991) at 56-59. Cited in Ellig, J., "Regulatory Reform in Electricity: Precedents from Other Industries" (November 1994).**

period, long distance call volume rose sharply.⁷ Today's competitive long-distance telecommunications network not only carries more traffic at lower rates; it is also widely regarded as providing better quality and reliability, and faster innovation, than the system provided on a monopoly basis.

Further evidence of the benefits of competition is presented by the interstate gas pipeline industry. Traditionally, the costs of natural gas supplies at the wellhead, i.e., the source of production, were combined with transportation costs in the rates charged by interstate pipelines, which acted as merchants. By the 1970s, supplies were perceived as dwindling and unreliable, and prices began to soar. In the mid-1980s, the FERC initiated a series of reforms that ultimately led to the complete separation, or unbundling, of the gas supply and transportation functions. Contrary to widely held expectations, gas production capacity increased and price competition caused gas prices to fall substantially. Between 1984 and 1990, real wellhead gas prices on an inflation-adjusted basis were cut virtually in half.⁸ The FERC continues to regulate unbundled interstate gas transmission, and has successfully implemented a mandate that all

⁷ **Gardner, T. and Gilson, L., Venture Associates/Arthur Andersen, "Predictable Patterns: Navigating the Continuum from Protected Monopoly to Market Competition" (December 1993) at 13.**

⁸ **American Gas Association figures indicate that prices fell from \$3.03/million cubic feet ("mcf") to \$1.57/mcf (constant 1988 dollars). Ellig, J., "The Consumer Impact of Federal Natural Gas Regulations," 60 Transportation Practitioners J. 275 (Spring 1993) (Quoted in Ellig, J., "Regulatory Reform in Electricity," id.)**

pipelines provide non-discriminatory, open-access transmission service on behalf of all customers.⁹ Despite initial concerns that FERC Order 636 would jeopardize reliability, the interstate pipeline industry has responded with impressive innovations, and the pipelines' reliability is widely perceived as having increased.

Other industries beyond the utility sector have undergone deregulation within the past twenty years, and the verdict on the results has been generally, although not uniformly, positive. Following the deregulation of the airline industry in the late 1970s, airline traffic increased, average fares stayed roughly constant or decreased (although impacts varied by time and location), and, according to statistical analysis, safety records continued to improve.¹⁰ Transportation rates in the trucking industry fell following deregulation; one of the chief results of this initiative was a tremendous spurt of innovation in the pattern of shipping goods around the country. In each of these cases, it is important to note that competition has yielded far more than significant price benefits. Equally or more important, it has spurred tremendous technological innovation and expanded service offerings at a rate far faster than during the prior years under regulation.

2. Risks and Uncertainties in Competition

Competition, in addition to all the benefits that it generates, typically results in disruptions to longstanding patterns of doing business. Even where broad public benefits result, the operation of unrestrained market forces can potentially harm individual interests. Throughout

⁹ **Pipeline Service Obligations and Revisions to Regulations Governing Self-Implementing Transportation and Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol (Order 636), 18 C.F.R. §284 (1992).**

¹⁰ **See Ellig, *id.* at 12-20.**

this process, the Department has been alerted to numerous public concerns that deregulation of electricity markets could yield a range of unintended consequences. Commenters have voiced concerns, for example, about a possible deterioration of system reliability and safety; environmental degradation; excessive price volatility; loss of universal service; loss of technological diversity; an onslaught of unwelcome marketing activity; catastrophic impacts on local communities' tax base; disruptive employment impacts within the utility industry; and new opportunities for the abusive exercise of market power. The Department has recognized its responsibility to anticipate and address these concerns as fully as possible during the transition to an open competitive marketplace.

Adverse consequences associated with competition can distract attention from, or even overshadow, the general benefits achieved through competitive reform. For example, statistical evidence suggests that airline safety has improved measurably over the years since deregulation.¹¹ Nevertheless, accidents, when they occur, are often attributed to deregulation. Despite the precipitous drop in long-distance telecommunications rates, periodic abuses by some carriers, and an onslaught of invasive telemarketing, have bred an attitude of distrust among many consumers.

It is impossible to give assurances that the restructuring of the electric services marketplace will not give rise to some forms of unintended consequences. However, the appropriate response is not resignation to the status quo, but vigilance as we move forward. For this reason, large portions of this proposal, and the Model Rules attached, represent the Department's efforts to anticipate and address problematic issues at the outset. We will continue

¹¹ **See Ellig, *op. cit.*, at 17-18.**

in our efforts to prevent problems before they occur, as well as in preparing our own agency, from a staffing and resource perspective, to address any problems as they occur. To be successful, this initiative must address the myriad issues by which our citizens, in their capacity as consumers of electricity as well as residents, taxpayers and employees, will form their own judgments of the value of restructuring.

D. The Department's Actions to Date

1. Historical Background

Our efforts to garner the benefits of competition for retail electricity consumers have evolved over many years. The Department was among the first state utility commissions in the nation to require utilities to employ competitive bidding in selecting QF resources pursuant to PURPA. D.P.U. 84-236 (1985). This competitive procurement system was subsequently extended to encompass non-utility, non-QF resources. D.P.U. 86-36-F (1987). The Department then adapted the concept of performance-based contracting for generation capacity, an innovation developed in the competitive power sector, in regulations providing for contract preapproval for major utility generation investments. D.P.U. 86-36-G (1988).

Ultimately, all of these innovations were encompassed in the Department's comprehensive integrated resource management ("IRM") planning framework. See D.P.U. 89-239 (1990). This process was subsequently refined and streamlined and renamed integrated resource planning ("IRP"). See D.P.U. 94-162 (1995). It provided for a regular, two-year planning cycle for all electric companies, encompassing several distinct phases of forecasting, need determination, negotiation, competitive solicitation, and contract approval. Public input was an integral feature of the IRP framework. Similar IRP frameworks were adopted in many states nationwide.

2. The Department's Initial Restructuring Investigation

Despite all of these efforts to promote competition, it became apparent to the Department by early 1995 that the existing IRP-based system, however carefully conceived, was still a regulatory attempt to mimic a competitive market. As such, it did not prove successful in promoting effective and timely decisionmaking. Critics claimed that IRP necessitated an unprecedented level of regulatory micromanagement of utilities' business decisions. Rather than offering choice to consumers, it functioned by imposing mandates upon electric companies.

This experience was not unique to Massachusetts. In April 1994, the California Public Utilities Commission initiated the first comprehensive inquiry into electric industry restructuring.¹² Other states, including Michigan and Pennsylvania, also launched inquiries into alternative structural approaches to regulating retail markets; this trend has continued and such inquiries are now underway in nearly 40 states.¹³

The Department took note of these changes and opened an inquiry "to investigate and determine (1) how a restructuring of the electric industry in Massachusetts would promote competition and economic efficiency and expand opportunities that would benefit consumers, (2) whether and how to extend to some or all customers the option of choosing their own electricity suppliers, (3) how such a restructuring could be implemented, and (4) the appropriate regulatory

¹² **Order Instituting Rulemaking/Investigation on the Commission's Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation, R.94-04-031/I.94-04-032 (April 20, 1994).**

¹³ **"Electric Industry Restructuring Update," Regulatory Research Associates, Inc., Vol. 15, No. 49 (December 13, 1996).**

mechanisms to apply to a restructured electric industry." Notice of Inquiry and Order Seeking Comments on Electric Industry Restructuring, D.P.U. 95-30, at 1-2 (February 10, 1995). We concluded this initial phase of our restructuring efforts with an order that reaffirmed the Department's core mission and established an overarching goal. "Reducing costs, over time, for all consumers of electricity is the primary objective of the Department's efforts in restructuring the electric industry. The Department's overall goal in this proceeding is the development of an efficient industry structure and regulatory framework that minimize long-term costs to consumers while maintaining the safety and reliability of electric services with minimum impact on the environment." Electric Industry Restructuring, D.P.U. 95-30, at 13 (1995).

In light of the Department's primary goal of reducing costs to consumers and our recognition of the new market and technological realities of the industry, we concluded that a system that introduces customer choice and competition in generation while preserving monopoly regulation of transmission and distribution services would better enable us to achieve our goal than would continued reliance upon the traditional system of regulation (see Figure 1 attached to this section). To guide the development of a market structure that would realize our goal of lowering costs while respecting the other important public purposes of regulation, the Department set forth principles that, in our view, would establish the essential underpinnings of an industry structure and regulatory framework that would meet our articulated goals. Id. at 15-17, 29-31. These principles, which have continued to guide all of the Department's efforts over the past year and a half, are set forth in Appendix C.

Finally, to ensure that the movement toward a new industry structure would proceed without undue delay, the Department established a schedule by which electric companies were

required to submit restructuring plans consistent with the principles established in D.P.U. 95-30. The Department encouraged electric companies to enter negotiations consistent with these principles in the interest of achieving an orderly transition. Id. at 46-47. Four utility-sponsored plans, as well as a plan sponsored by the Commonwealth's Division of Energy Resources, were submitted to the Department on February 16, 1996. No settlements were reached during this period.

3. The Current Rulemaking

Upon review of the initial restructuring plans, the Department determined that the disparities in the approaches taken by the various companies would make it administratively inefficient to subject these plans immediately to adjudication. Instead, we placed these plans in abeyance, and responded to requests from the electric industry for the Department to offer more guidance by opening a generic rulemaking with the goal of establishing rules that would apply to all electric companies' restructuring plans. Order Commencing a Notice of Inquiry/ Rulemaking, D.P.U. 96-100 (March 15, 1996).

Following initiation of the rulemaking, the Department solicited a first round of comments on April 12, 1996. On May 1, 1996, we issued a draft set of rules ("May 1 Rules") accompanied by a detailed explanatory statement ("May 1 Statement") that presented our own framing of restructuring issues. Comments on the May 1 Rules and Statement were filed on May 24, 1996. On the basis of these filings and presentations, the Department conducted 15 days of legislative-style hearings in Boston from June 11 through July 18, 1996. Interested persons filed final post-hearing comments on August 2, 1996. A list of comments received on each date is included at Appendix E. The Department wishes to thank the commenters for their thoughtful

and comprehensive contributions to this process. We particularly value the contributions of many members of the Legislature in letters and testimony at public meetings. We have carefully reviewed and considered all comments received in the course of this proceeding.

The Department's schedule of legislative-style hearings, held during the daytime at our offices, was complemented by an extensive effort to inform members of the Legislature, the general public and various groups about this process. The Department held a total of sixteen evening hearings in every area of the state.¹⁴ We wish to thank the many hundreds of interested citizens who attended these evening hearings and offered their views on the process.

The Department has also presented briefings on this restructuring process for numerous industry and community groups. We have presented testimony to, and met informally with, members of the Legislature on numerous occasions. During the months of June and September 1996, we arranged for investor-owned electric companies to distribute brochures in customers' bills that provided an overview of the restructuring process. A sample bill stuffer from the September 1996 mailing is shown in Figure 3 at the end of this section.

From the opening of our initial inquiry in D.P.U. 95-30 to the present, it has been clear that the restructuring initiative presents issues of unusual complexity. Recognizing the time value

¹⁴ **The Department conducted an initial set of five evenings hearings on company-specific restructuring plans in March 1996. The Department conducted five evening hearings during July. On August 9, 1996, we extended the schedule in this proceeding to accommodate additional opportunity for public and legislative input as well as analysis; we conducted six evening hearings during October and November 1996. See Figure 2 at the end of this section for a map illustrating the dates and locations of these hearings.**

of achieving the benefits of restructuring for consumers, the Department has continually encouraged the filing of offers of settlement as a way to expedite the restructuring process, and we continue to encourage parties to negotiate such agreements. Any settlements presented to us will be evaluated on the basis of their consistency with the Department's principles, established in D.P.U. 95-30 and expanded upon in this proceeding, and with the public interest, as well as the breadth of support they receive.¹⁵

E. The Future Role of the Department

The restructuring of the electric services industry will necessitate changes in the Department's structure, resources, and methods of operation. Our core mission to protect the public interest in safe and reliable, low-cost electric service remains unchanged by restructuring. Nevertheless, the Model Rules in Appendix A, if implemented, would change the nature of the Department's regulatory oversight of the generation sector. Our historic approach to regulating generation-related costs was focused on cost accounting and planning issues. The Model Rules contemplate that the Department's role will be focused more on assuring full and fair competition through the enforcement of fair and impartial rules. The Department will require

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We currently have before us an offer of settlement filed jointly by the Attorney General, Massachusetts Electric Company ("MECo"), the Division of Energy Resources, and numerous other parties in Massachusetts Electric Company, D.P.U. 96-25. In addition, the Department has received indications of forthcoming offers of settlement to be filed by Boston Edison Company ("BECo") and Eastern Edison Company ("EECo"). We will address the merits of the MECo offer of settlement in an Order to be issued in the near future, and the BECo and EECo offers of settlement in an appropriate timeframe.

additional resources in the areas of competitive analysis and antitrust law. If the experiences of other state utility commissions serve as a reliable guide, it is also likely that the Department will require significantly expanded staffing and funding in the area of consumer assistance and education.

Other types of legislatively-mandated filing requirements that have consumed a considerable level of electric company resources may become unnecessary in a restructured environment. Among the statutory reforms proposed in the Department's Legislative Proposal at Appendix B, are the elimination of the reconciling fuel clause, which shifted the risk of changing fuel prices from utility shareholders to ratepayers. This clause, in its modern form, was instituted in response to the rapid increases in fuel prices of the mid-1970s. It is no longer necessary in an environment in which fuel price hedging instruments are widely available and in which generation suppliers compete head to head on a variety of factors, including fuel costs.

The Department also proposes to eliminate the requirement that electric companies obtain approval of power supply contracts of a duration longer than one year. In an open market environment, customers will have the option to choose another supplier if their current supplier, in their view, does not provide adequate service.

The legislation would authorize the Department to eliminate the requirement that electric companies submit periodic long-term forecast and supply plans. Electric companies will no longer be in the position of planning for all customers' needs on a monopoly basis. Furthermore, the economic consequences of building too many power plants will be borne directly by investors, rather than ratepayers.

Each of these requirements was suitable under the traditional monopoly framework of regulation, in which the Department substituted its judgment for the decisions of the marketplace

in these areas. However, a market framework based on competition and choice would allow consumers' decisions to determine the composition of the power supply mix. Because this new framework will allow customers to signal their preferences directly, we are confident that it will tend to produce lower electricity costs over time and, as we have said, will also provide incentives to electric companies and other service providers to offer the kinds of services customers want, at prices they are willing to pay.

F. Conclusion

The restructuring of the electric industry requires the support and cooperation of the Department and FERC as well as the Massachusetts Legislature and the United States Congress. While we believe that the Department already has the authority to implement many components of restructuring, we recognize the interest of the Legislature in providing guidance on such a significant public policy reform. In general, our draft legislation proposes that the Legislature establish the framework of a restructured industry and authorize the Department to fill in the details by rulemaking. The Model Rules presented in Appendix A, with the exception of the two areas discussed immediately below, indicate how we intend to implement the restructuring principles that we recommend the Legislature adopt. Should the Legislature enact any different principles, the Department would modify the final rules consistent with such principles after further notice and comment.

Two areas of this rulemaking are ripe for final action by the Department. In conjunction with the issuance of this document, and under our existing authority,¹⁶ we are enacting standards

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G.L. c. 164, §§ 76A, 76C, 85, 85A, 94A, 94B, 94C.

of conduct for natural gas and electric distribution companies with affiliates engaged in competitive activities. These standards of conduct are presented in this document at Appendix F. They will become effective upon their publication in the Massachusetts Register.

In addition, we have previously determined that we possess sufficient authority under our existing statute to require that existing rates be unbundled, in a revenue-neutral manner, into generation, transmission and distribution components in 1997.¹⁷ This rate unbundling will facilitate for consumers the transition to competitive generation supplies in 1998 (Figure 4 and Figure 5 at the end of this section provide samples of bills before and after unbundling. Figure 6 depicts a sample bill after retail access has been introduced). Therefore, we are setting forth a schedule today under which all electric companies must file, on March 3, 1997, revenue-neutral unbundled rates (see Section XII and Appendix I for further discussion).

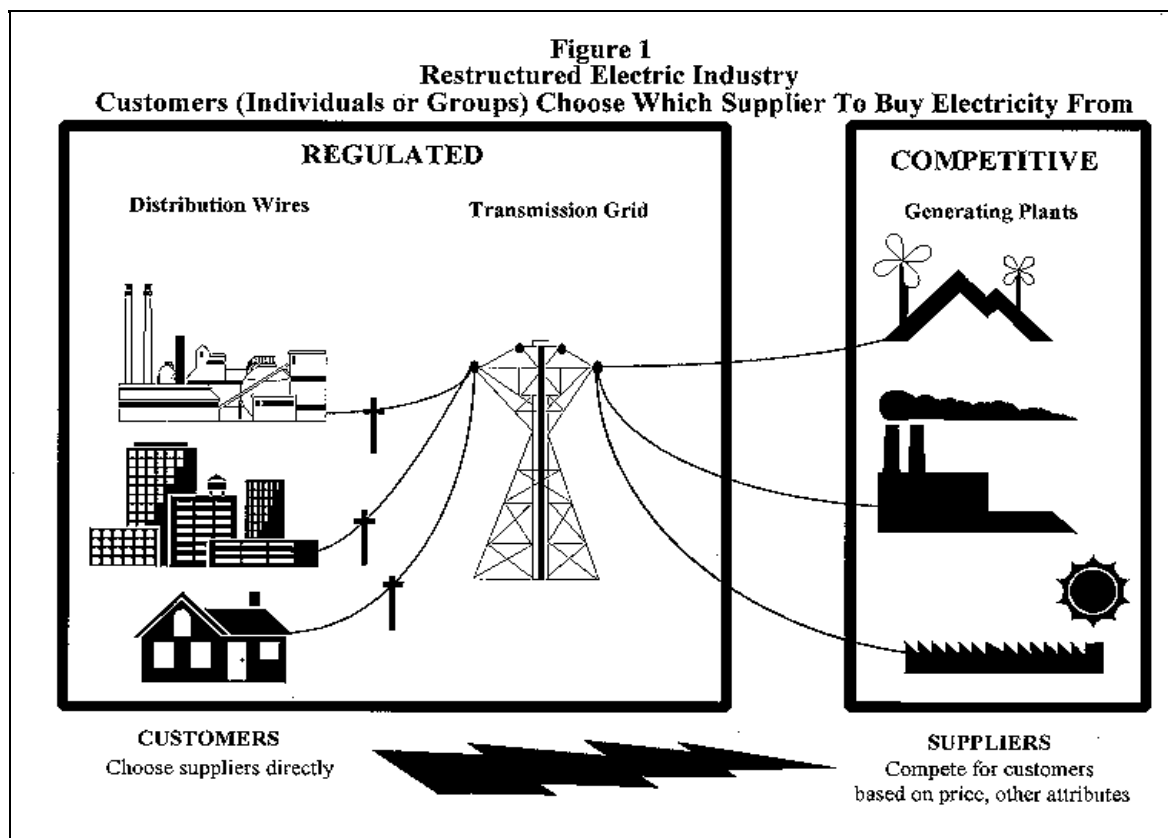
The Department has attempted, through this document, to address restructuring issues as comprehensively as possible. However, it is simply not possible to resolve all details of restructuring before the market begins operation. One feature of a competitive market is that it is, by its very nature, a work in progress. If it is well-structured and balanced, and open to further reforms in light of experience, it should be inherently self-correcting, thus remedying a critical failure of the traditional regulatory system. The Department is fully committed to maintaining a vigilant oversight role during the transition. Therefore, we look forward to early legislative action on this proposal, and we pledge to make necessary refinements through time.

¹⁷

See D.P.U. 95-30, at 40-43.

The many issues in this case have been aired, thoroughly and intensively, over a two-year period. The time is ripe for action. The electricity industry in New England faces several major uncertainties in the years ahead. These include impending new environmental regulations that could require investments or upgrades at older fossil-fuel plants, and the closure of one and possibly more large nuclear plants. For several years, the existing regulatory system has not been able to manage these pressures efficiently, and the current environment of uncertainty makes it problematic for electric companies to undertake new resource commitments. The ability, in practice, of industrial customers to obtain cost savings while other, smaller customers are held captive is further evidence of the need for a regulatory reform that will provide opportunities for all consumers to benefit.

Accordingly, we are taking immediate steps within our authority and presenting for the Legislature's consideration the Model Rules contained in Appendix A of this document, as well as the Legislative Proposal contained in Appendix B. Passage of this legislation, we believe, would provide the Department with a clear mandate to implement these Model Rules. We respectfully urge the Legislature to take up the issue of electric industry restructuring early in the upcoming session, and pledge our full cooperation in efforts to ensure that, within the next year, electric consumers in Massachusetts will enjoy the benefits of competition and freedom of choice.



SECTION II -- RESIDENTIAL CONSUMER PERSPECTIVE

The purpose driving our efforts to restructure the electric industry is to benefit all consumers. Our proposal to introduce competition is intended to reduce costs over time for consumers, while retaining or enhancing safety, reliability, environmental protections and consumer protections. While restructuring will bring changes, some of the most basic aspects of the system on which customers have come to rely will not change. Throughout the process of implementing retail access, we intend to keep consumers informed.

The purpose of this section is to explain the Department's proposed restructuring in five areas of particular interest to consumers. First, the introduction of competition in the electric industry will mean that for the first time, each consumer will be able to choose among a variety of suppliers of electric generation service, including those who offer renewable energy. Consumers will learn about electricity supply options through telephone solicitations, mailings, and other marketing mechanisms. Some consumers may choose to retain or go back to their current electric company as a supplier, options that will be called standard offer or default service, respectively. Second, consumers will continue to experience the same level of reliability that they do currently. Third, consumers, including low-income consumers, will enjoy the same level of protection from termination of service and unfair billing practices currently afforded them, through the Department's oversight of the distribution companies and, in certain areas, competitive suppliers. In addition, low-income customers will continue to be offered electricity at discounted rates. Fourth, environmental protection and energy efficiency are important goals in restructuring; the Department has therefore proposed several methods for improving environmental quality to be implemented during the transition to retail competition. Reducing the adverse environmental impacts of electricity generation will benefit all consumers as citizens of the Commonwealth. Finally, the Department has established a task force that promotes public participation and education, and will continue to work to educate consumers about how the restructured electric industry will work.

SECTION II -- RESIDENTIAL CONSUMER PERSPECTIVE

A. Introduction

Changes are happening in the electric power industry that will affect every consumer of electricity in the Commonwealth. These changes include, among other things, the opportunity for consumers to choose a supplier of electricity directly, changes in the way that electricity prices are determined, and changes in the types of services that will be offered.¹⁸ Under the Department's plan for restructuring, we are confident that consumers will be able to buy electricity at lower prices, receive higher quality of service, and enjoy the same level of reliability that is currently enjoyed by all electric consumers. This section outlines some of the key changes envisioned by the Department and focuses on how those changes may affect residential electric consumers.

The Department anticipates that direct access will be introduced to retail electricity customers on January 1, 1998. Direct retail access will mean that, for the first time, each consumer will be able to choose among a variety of suppliers of electric generation service. Those suppliers will compete for business in much the same way as suppliers of other goods and services compete, based on such considerations as price, quality, and demand for customer

¹⁸ The initial changes will not be large, but they will be of considerable interest to those who pay close attention to their monthly bills. While many consumers have learned about the impending changes from the newspaper, bill inserts, or the radio, other consumers may not notice variations, even after they have occurred.

service. However, electricity differs from other goods and services in important ways,¹⁹ some of which require special attention from regulators and consumers. This is particularly the case during the transition from the current regulated industry framework to a competitive generation market.

B. Consumer Choice

1. Unbundling

The first change that consumers will see as part of the transition to a restructured electric industry is the separation, or “unbundling,” of charges on their electric bills, which should take place in 1997. The costs of major components of delivering electricity service will be identified individually. The cost categories include generation, transmission, distribution, and access or customer charges.

Generation is the service of producing electricity in power plants by transforming other forms of energy (e.g., fossil fuels, wind, nuclear fuel) into electric energy. Transmission is the service of transporting electricity over high-voltage power lines from a generating plant to a substation or delivery point in an electric company's service territory. Distribution is the service of delivering electricity from the electric company's substation to the customer's premises; substations, utility poles and wires are the typical components of each electric company's distribution system. An access or customer charge will recover costs such as billing, metering,

¹⁹ Electricity is unique in that it cannot be stored and therefore must be generated as needed, a characteristic that affects prices differently at different times. Virtually all aspects of electric services, including rates, organization, planning, acquisitions and other business and financial decisions, have been regulated by state and federal agencies since electric service became commercially available approximately 100 years ago.

and customer service, as well as charges for what are called stranded costs and stranded benefits. Stranded costs are the difference between the embedded costs of utility generation and its market value, after accounting for the maximum possible mitigation of such costs. Stranded benefits include energy efficiency and renewables programs. The access charge will be regulated by the Department, as will the charges for distribution. Transmission charges are and will be overseen by the FERC.

In the restructured electric industry, the service that will become competitive is generation. After January 1, 1998, customers will be able to buy generation services that will be offered separately through competitive suppliers. The Department will then no longer set rates for power or services from competitive suppliers. Rather, we expect a robust generation market to develop, in which many companies will aggressively compete to sell power. This competition should result in lower-priced electricity for all customers. We will continue to exercise oversight related to consumer protection.

2. Choosing a Supplier

When consumers consider purchasing a good or a service, the first question that they usually ask is how much it will cost. We expect and encourage competition in the pricing and provision of retail electric generation. To take advantage of the choices offered in a competitive electricity market, customers must be able to make informed comparisons and choices. They have to know what the cost is. Competitors in the pilot retail choice programs in the region have offered a variety of pricing mechanisms as well as promotional gifts and discounts, making it difficult to determine which deal is really the best. In order for customers to be able to compare offers, price information must be presented in a clear and concise. Therefore, the

Department will ensure that information about prices will be available from all suppliers in a consistent format (see Section VII).²⁰

Consumers may base their decisions on factors other than price. One such factor might be the source of energy used to produce the electricity. In the current industry structure, electricity is produced using a combination of coal, oil, natural gas, nuclear fuel, hydropower, wind energy, and solar energy. Consumers by and large have no opportunity to choose the source of power that is produced on their behalf. During this rulemaking process, many consumers expressed an interest in purchasing "green" power, that is, electricity that is generated using energy sources that cause less environmental damage than the most commonly used energy sources. With retail choice, if a consumer wants to buy wind power, he/she can have an agreement with the wind generator, stating that the customer will purchase energy at a certain price and that the generator will produce wind energy on behalf of that customer.²¹ In order to allow consumers to compare various offers based on their environmental claims, the Department will require all suppliers to provide accurate and timely information about their resource mix and air emissions on all bills and marketing materials (see Section VII).

The availability of energy efficiency services and comprehensive energy services are other options that consumers might consider in making a choice about an electricity provider. While electric distribution companies will continue to offer energy efficiency services to their customers

²⁰ The Department plans to meet with all distribution companies and competitive suppliers that issue bills to retail customers to develop a format for bills.

²¹ Through a contractual arrangement, a customer can ensure that particular generators operate.

(see Sections VI and IX), some suppliers may find it profitable to offer more comprehensive efficiency measures along with generation services to consumers seeking to lower their bills. In addition, some suppliers may seek to sell natural gas and home heating oil or other services to residential customers, providing comprehensive billing for the customer and efficiencies in overall energy use in the home.

The Department will regulate competitive electricity suppliers by requiring them to register with the Department and to conform with certain requirements in order to be considered a supplier in good standing. These requirements include, among other things, providing a toll-free "800" number so customers will have speedy and reliable access to the company; billing in accordance with existing billing regulations (220 C.M.R. §§ 25.00 et seq.), which protect consumers; providing accurate information on the resource mix, emissions, and pricing as discussed above; and maintaining a security bond with the distribution company (see Section VII).

Customers who do not choose a supplier through the competitive market will automatically continue to receive generation service from their distribution company for a transitional period, a service called standard offer service. The prices for standard offer service will be regulated by the Department. Customers will be able to remain on standard offer service for up to five years after the retail access date (which is anticipated to be January 1, 1998). If a customer receives service from a competitive supplier and then stops receiving such service for any reason, the distribution company will automatically provide default generation service. The price for default generation service will be the spot market price (see Section VII).

C. Reliability

In D.P.U. 95-30 at 1, the Department stated that our overall goal is to develop an efficient industry structure and regulatory framework that will minimize costs to consumers while maintaining safe and reliable electric service with a minimum impact on the environment. Among the Department's paramount concerns is that the level of overall system reliability that consumers have traditionally enjoyed be preserved. In public hearings, questions regarding how reliability will be preserved were frequently asked. The Department's response addresses this issue at three levels: (1) the reliability of the system of generating and transmission facilities that support the region's electricity market (i.e., the bulk power system), (2) the reliability of the distribution system serving individual customers, and (3) the reliability of the individual generating units behind a contract that a customer might sign with a supplier.

If customers are to receive electricity through the distribution wires that serve them, the generating and transmission facilities that ensure that power is delivered to end use markets must be available and operating reliably. The Department continues to emphasize that the restructuring of the electric industry must preserve the level of reliability that customers have traditionally enjoyed (see Section III).

As is discussed in greater detail in Section VI, the distribution of electricity will continue to be regulated by the Department under a regulatory framework that is very similar to what has been in place for many years. The facilities that provide reliable distribution service typically include the substations, utility poles, wires and transformers that might be seen along any roadway.²² The Department will ensure that distribution companies continue to plan for and

²² When a customer experiences an interruption of service today, e.g., during a storm, it is
(continued...)

operate their systems in a manner consistent with current standards so that reliability will not change.

If a customer signs a contract with the owner of a particular generating unit, the customer might be concerned about whether he/she would continue to receive electricity if that owner goes out of business or if the generating unit fails to operate. However, because the customer would remain connected to a distribution company's system as a result of the distribution company's "obligation to connect" (that is, no one would cut the wire leading to the customer's home or business, see Section VII), that customer would continue to receive electricity through the default service provided by the distribution company when suppliers fail to perform. What might change (and probably would, within certain limits established by the Department, also discussed in Section VII) is the price at which that electricity would be delivered.

D. Consumer Protection

In a restructured electric industry, consumers will enjoy the same level of protection from unfair billing practices and termination of service that they do currently. Electric companies now bill for supply as part of a bundled bill. In the restructured industry, supply billing may be done in conjunction with the bill for distribution services by the distribution company, or, if customers choose, directly by a competitive supplier. Historically, the Department's provisions against unfair billing practices and termination were warranted by the monopoly nature of the service. In

²²(...continued)

almost always due to a problem with the distribution system. In part because the distribution company will remain regulated as it is today, customers should not see any change in distribution reliability.

time, it may be evident that such provisions are no longer needed in the supply segment of the business. However, at least during the transition period before competition in supply is fully developed, the Department will apply its billing regulations to both distribution companies and competitive suppliers who bill customers. These regulations include (1) a process for dispute resolution, including an adjudicatory hearing before the Department pursuant to G.L. c. 30A; and (2) notification and timing requirements for billing and termination of service. For customers who select an alternative billing arrangement, the Department will require the competitive supplier or other billing entity (where a distribution company delegates its billing authority) to conform its billing practices to the Department's existing regulations so that customers do not have to deal with potentially different systems of billing, and so that all customers receive billing protection.

In today's electric industry, the phrase "termination of service" means that electric service to a customer's residence is completely terminated (i.e., the electric company deenergizes its distribution wires to the customer's residence and the customer no longer receives electric current). In the restructured electric industry, a competitive supplier will only be able to terminate its generation contract with a customer; it will not physically control power flow from the distribution grid to the customer's home or place of business. In that event, the customer would then become a default generation customer of the distribution company. The customer would not lose electric service. Instead, the customer would receive default service until he or she obtained a new competitive supplier.²³

²³ The customer, however, is likely to see a change in price, which could be upward or downward, as a result of receiving default service because default service would be priced at the spot market. Spot market prices will, by their nature, fluctuate in response to prevailing conditions.

Termination of service can only result from action by a distribution company, not a competitive supplier. Therefore, termination of service regulation will continue to apply to the distribution company. These regulations, which will remain unchanged, include (1) a winter moratorium on termination of service to electric heat customers with financial hardship; (2) prohibition of termination of service to elderly customers, and to ill customers or customers with an infant, who can demonstrate financial hardship; and (3) restrictions on termination of service to tenant-customers (see Section VII).

Under the current system, residential customers can seek assistance from the Department's Consumer Division when a problem arises that cannot be resolved between the customer and the company. In a restructured industry, distribution companies will provide most of the services that directly affect consumers, such as delivery of electricity, billing and metering. Customers will still be able to call the Department's Consumer Division at (617) 727-3531 or (800) 392-6066 for help with disputes with a distribution company.

If a billing dispute arises between a supplier and customer, and if the supplier is the entity responsible for billing the customer, consumers will still be protected. The Department will subject the competitive supplier to our billing requirements. Therefore, a customer will be able to seek a hearing before the Department regarding a competitive supplier's alleged lack of compliance with the billing requirements. Customers with non-billing complaints against competitive suppliers will be able to use other services, such as the Better Business Bureau at (617) 426-9000 and the Attorney General's Consumer Protection Bureau at (617) 727-8400. In addition, customers obtaining generation service from a competitive supplier will be able to avail themselves of existing state remedies for consumer complaints.

E. Low-Income Customers

At the outset of the restructuring process, the Department established the principle that restructuring must assure continuation of universal service, providing a level of protection for low-income customers equivalent to that provided within the current industry structure.

D.P.U. 95-30, at 25. In recognition of the fact that electric service is essential and should be available to all customers, our view is that restructuring offers no reason for utilities to back away from existing commitments undertaken to ensure that electricity is affordable to all individuals. We will continue to require each distribution company to offer a low-income tariff with the same eligibility criteria as are currently in place. The low-income discount will apply to the distribution charge, and during the transition period, the discount will also apply to the stranded cost charge.²⁴

F. Environmental Quality

Environmental quality is an important issue for the Commonwealth, one that affects the health and welfare of all residents. While many have expressed concern that increased competition will exacerbate the electric industry's environmental impact, a restructured industry may in fact offer new opportunities to reduce the environmental impact of the industry. Such opportunities could arise either through consumer choice of sources of electricity with low

²⁴ We note that while the dollar amount of the discount will be unchanged, the low-income discounts, in percentage terms, will be substantially higher than the low-income discounts offered under present rates. This is because a larger portion of the total bill is currently discounted than will be discounted under the Department's proposal which unbundles rates. We recognize that anomalous situations could arise and will address them on a case-by-case basis.

environmental impact, such as renewable energy resources,²⁵ or through environmental regulations that take advantage of a greater emphasis on market mechanisms that provide incentives to reduce the level and cost of emissions.

G. Consumer Education

In D.P.U. 95-30, we established the principle that the transition to competition in the generation sector of the electric industry must be orderly and expeditious and minimize customer confusion. D.P.U. 95-30, at 45. The Department anticipates playing a vital and continuing role in educating and listening to the public during the restructuring process. In order to provide a forum for public participation, the Department has held sixteen public meetings, from March to November, 1996, throughout the Commonwealth.²⁶ Particularly during the early meetings, the confusion surrounding electric industry restructuring was evident.

On March 15, 1996, the Department created the Consumer Education Advisory Task Force ("Task Force") to enhance and "ensure public education and opportunities for public input throughout the restructuring process" (March 15, 1996 Notice of Inquiry/Order Opening the Restructuring Investigation in D.P.U. 96-100, at 7). Consumers cannot make efficient choices without adequate information; thus, the Department's goal of the development of an efficient industry structure can only be achieved if relevant information is made available to potential consumers. Task Force membership includes representatives of the Department, consumer

²⁵ We are proposing a renewables charge of one-tenth of a cent per kilowatthour to be paid by all users of electricity to help lower the cost of renewable energy (see Section IX).

²⁶ There were five meetings on company-specific plans and eleven on the Department's proposal.

groups, and electric companies. The activities of the Task Force are being coordinated by the Consumer Division of the Department, which can be reached at (617) 727-3531 or (800) 392-6066. The Task Force is organized into ten small groups dedicated to providing information and correspondence to various organizations. To date, the Task Force has made progress in public education by methods such as issuing press releases and developing an Internet web site (which can be found at <http://www.magnet.state.ma.us/dpu/>) with restructuring information, and will continue to educate the public and promote public participation during the restructuring process (see Appendix G).

SECTION III -- THE BULK POWER SYSTEM

The bulk power system in New England comprises the generation and transmission facilities that operate to meet the demands of electricity consumers in the region. NEPOOL has operated the New England bulk power system as a single control area since 1971. NEPOOL has coordinated operation of the bulk power system to provide electric companies and their customers with critical and significant benefits in terms of power supply reliability. These benefits must be retained in the transition to a restructured electric industry.

The Department reaffirms that the New England bulk power system should continue to be operated as a single control area in a manner that maintains current standards of reliability. Preserving these essential features of the current system in the evolution toward a restructured industry will provide benefits to consumers and to market participants. In addition, the system operator must be independent of participants in the market and should be responsible for operating the bulk power system in a non-discriminatory manner to advance robust competition in the generation market.

The Department believes that the independence of the system operator is critical to the foundation of a competitive generation market, and that without a truly competitive generation market, the full benefits of retail competition may not be achieved for consumers. Transmission and system operation must be truly independent from the ownership of generation. Accordingly, the Department intends to work actively at the state, regional, and federal levels to ensure that the structure and operation of the bulk power system are established in a manner that is consistent with the principles the Department articulated in D.P.U. 95-30, and thus most likely to achieve for consumers the benefits of a restructured industry. These principles emphasize that the continuing reliability of the system and the promotion of full and fair competition are paramount concerns in restructuring the electric industry.

The FERC has jurisdiction over the rules and agreements that will govern the system's wholesale electric transactions. The conclusions and proposals in this section will form the basis for the Department's intervention in relevant federal regulatory proceedings and related inquiries. Because the operation of the bulk power system is jurisdictional to FERC, the Department makes no request to the Legislature for legislative changes pertaining to the bulk power system.

SECTION III -- THE BULK POWER SYSTEM

A. Introduction

The bulk power system comprises the electric generation and transmission facilities that produce and deliver electricity to substations for distribution to end-use customers. Currently, the generation and transmission facilities of Massachusetts electric companies, as well as those of electric companies in the other New England states, are dispatched and operated as if they were a single New England-wide company in accordance with the provisions and protocols contained in the NEPOOL Agreement, and the related NEPOOL Criteria, Rules, and Standards. Generation facilities of the NEPOOL members are dispatched primarily based on their fuel expense, and savings that result from coordinated generation dispatch are shared among NEPOOL members. NEPOOL has operated the bulk power system in accordance with Northeast Power Coordinating Council ("NPCC") and North American Electric Reliability Council ("NERC") reliability standards and protocols.²⁷ NEPOOL's coordinated operation of the bulk power system in New England since 1971 has provided electric companies and their customers with critical and significant benefits, including power supply reliability and cost savings. Thus, New England already enjoys a level of coordination in the bulk power system that does not exist in most of the country. The benefits of the bulk power system and its operation must be preserved in the transition to a new industry structure. May 1 Statement at 10.

²⁷ NERC was founded by electric companies in 1968 to coordinate, promote, and communicate about the reliability of their generation and transmission systems. NERC is made up of nine regional councils including the NPCC. NEPOOL is part of the NPCC.

The structure and operation of the bulk power system must accommodate increasing numbers and varieties of suppliers, and must allow efficient competition among them, if consumers are to enjoy the potential benefits of increased efficiencies in a competitive generation market. Consumer choice will be meaningful only with a "range of viable suppliers who are able to compete in the generation market." D.P.U. 95-30, at 18, 20. The Department has not prescribed the details of a competitive generation market or of the bulk power system that would support such a generation market, but it has identified certain threshold characteristics that must exist in order for competition to exist among a "range of viable suppliers" in a generation market. In particular, "there must be (1) many buyers and sellers with effective access to each other, (2) arm's-length transactions between buyers and sellers, (3) broad and equal access to timely market information, and (4) low thresholds for entry." May 1 Statement at 12.²⁸

In its May 1 Statement, the Department set forth, as part of its vision for a restructured electric industry, the basic features of a bulk power system that would support a competitive

²⁸ The Department is committed to ensuring that all suppliers who would bring new generation supplies to the market are able to do so on an equal basis and without inordinate barriers to entry. Within this context, a number of concerns arise with respect to G.L. c. 40A, § 3, under which only a "public service corporation" can petition the Department for an exemption from the operation of zoning ordinances and local by-laws. There is a question as to whether a non-utility generator is a public service corporation (see proceedings in Berkshire Power, D.P.U. 96-104). While this issue did not receive much attention during the course of this proceeding, it must be resolved if a fully competitive market is to be achieved. We are considering issues associated with the siting and construction of new generation in a competitive generation market. As always, any entity seeking to construct a new generating facility would have to receive approvals from all relevant permitting agencies, including the Energy Facilities Siting Board if the facility is 100 MW or larger, and would be expected to pursue the support of the municipality in which the facility would be sited.

generation market. Such a restructured industry would build upon the current bulk power system by continuing to rely on a system operator to operate the New England bulk power system as a single control area at current standards of reliability. Id. at 13-15. The system operator's dispatch of units should accommodate unit dispatch schedules contained in market participant contracts. Id. at 14-15.

In contrast to the existing system, however, the system operator must be "truly independent of participants in the market." Id. at 13. The Department requested comments regarding (1) how membership and governance rules can be established so that no market participant can control the operations of the independent system operator ("ISO") and so that no participant can exert excessive influence, and (2) whether the ISO should be prohibited from having any corporate relationship to market participants to prevent their undue exercise of market power. Id. at 13-14. The system operator should, at a minimum, maintain current standards of reliability. In addition, the Department sought to explore what other responsibilities the ISO should bear, such as dispatching all generating units to enhance economic efficiency or facilitating the development of a competitive generation market. Id. at 17-18.

The Department also contemplated a power exchange ("PE") that would facilitate a short-term pool for energy market transactions. We did not see compelling reasons for combining the merchant function of the PE with the reliability function of the ISO. We anticipated, however, that separation of the two could avoid concerns over market power and affiliate transactions, and stated that the PE should not have any corporate relationship with market participants. Id. at 13, 22-25. We posed questions concerning the details of the function and structure of the PE, including what provisions would be necessary to minimize potential abuses of market power,

as well as the appropriate relationship between the ISO and the PE.²⁹ Id. at 24. Finally, we stated that there should be open, non-discriminatory access to the transmission grid, and that the system operator should obtain control over transmission facilities in order to ensure open access and fulfill its other obligations. Id. at 9, 14, 20-22.

B. Issues Raised

Comments pertaining to the bulk power system focused primarily on the role of the bulk power system operator, the independence of the system operator from market participants, generating unit dispatch, and the system operator's role in maintaining reliability of the bulk power system.

There was widespread agreement among commenters regarding the importance of establishing an ISO to operate the bulk power system in New England, in order to (1) maintain system reliability and (2) mitigate concerns regarding the potential for market power abuses by the vertically-integrated electric companies (see, e.g., Tr. 1, at 14, 15, 23, 28). Commenters, focusing on a proposal for restructuring NEPOOL, disagreed on how to establish the independence of the system operator and on how much independence would be sufficient to minimize potential abuses of market power.

MECo and WMECo described a proposal from NEES for revising the NEPOOL agreement to accommodate increased competition in the electric industry (Tr. 1, at 14-16, 28-30). Under that proposal, NEPOOL, which would remain a wholesale power pool and voluntary association of eligible participants, would establish the rules for market participants and for the

²⁹ For a discussion of market power, see Section V.

operation of the transmission system (NEPOOL Restructuring Proposal, August 2, 1996, at 2, 6).³⁰ Thus NEPOOL participants would "determine the operational and planning rules for the new market structure, the pricing and planning rules for the regional transmission grid, and the process for resolution of disputes when they arise" (*id.* at 6). According to the proposal, the ISO would implement and monitor the rules and market protocols "in a completely independent, neutral and non-discriminatory manner" pursuant to a contract between the ISO and NEPOOL (*id.* at 1, 6). The ISO would be governed by a board of directors who are not associated with any of the market participants (*id.* at 6). The ISO budget would be funded and approved by NEPOOL and would be contained in the contract between the ISO and NEPOOL (*id.* at 3-4).

Some commenters strongly opposed an ISO governing structure that would essentially incorporate the current NEPOOL voting structure on the grounds that allowing the NEPOOL participants to establish rules for implementation by the ISO would give large market participants, such as the larger IOUs that are currently NEPOOL members, too much control over the emerging generation market (*see, e.g.*, CPC August 2, 1996 Comments at 26; DOER August 2, 1996 Comments at 4; MLP August 2, 1996 Comments at 4-5; Enron August 2, 1996 Comments at 7-9; CLF August 5, 1996 Comments at 2).

Commenters offered a range of opinions regarding the merits of centralized bid-based dispatch and self-scheduled dispatch (*see, e.g.*, Tr. 1, at 78-123; MLP August 2, 1996 Comments at 6-7; Enron August 2, 1996 Comments at 2-4; DOER August 2, 1996 Comments at 6-8; AIM

³⁰ This proposal forms the basis for the Restated New England Power Pool Agreement, which continues to evolve. The Department's comments are based on the most recent version, dated November 27, 1996.

August 2, 1996 Comments at 7-11). Under a self-scheduled dispatch approach, a generating unit that has a power contract with a customer would inform the system operator of this contract and of the unit's intention to deliver electricity to the bulk power system during a specified period. Under a centralized bid-based dispatch approach, generating units would submit day-ahead bids to the system operator, or some entity working closely with the system operator. The system operator would perform production simulations, using the bid prices submitted, to determine the dispatch that would be reliable and most efficient.

Commenters expressed various positions regarding the number of generating units that must be available to the ISO for dispatch in order to maintain the current level of reliability. Some suggested that the ISO would need to contract with only a few generators, and only a small percentage of those generators' output, for stand-by service on a regular basis (Tr. 1, at 48, 75-76, 120-121; WMECICG May 24, 1996 Comments at 8). In contrast, some stated that the ISO must control all generators to maintain a reliable system (MMWEC May 24, 1996 Comments at 5; MLP August 2, 1996 Comments at 5-6). Most commenters agreed that the ISO should have sufficient control over generating units participating in the New England bulk power system to ensure reliability of the bulk power system (see, e.g., CPC August 2, 1996 Comments at 23, n.13; Enron August 2, 1996 Comments at 6; IEC May 24, 1996 Comments at 4; NIEP May 24, 1996 Comments at 10, 13; AIM May 24, 1996 Comments at 6).

C. Current Department Proposal

The Department's primary goal for restructuring is to increase the efficiency of the electric industry in order to lower costs to consumers while maintaining safe and reliable electric service.

D.P.U. 95-30, at 13. The restructured industry should provide the broadest possible customer

choice, with an opportunity for all consumers to share in the benefits of increased competition, and should ensure full and fair competition. Id. at 15-16.

The goals and principles for restructuring do not in themselves prescribe a particular model for operation of the bulk power system. The Department recognizes that there are a number of mechanisms possible for ensuring that the bulk power system contributes to an industry structure that will offer lower costs to consumers while maintaining the safety and reliability of electric supply. However, after careful consideration of the testimony in hearings and written comments, we reaffirm our view that the following elements are essential features of the bulk power system.

First, the New England bulk power system should be operated as a single control area by an independent system operator.³¹ Second, the system operator should be responsible, at a minimum, for maintaining current standards of reliability. Third, the system operator should operate the bulk power system in a non-discriminatory manner to facilitate efficient competition in the generation market. Fourth, the system operator should accommodate self-scheduling in the dispatch of generating units, but should have the ability, in an emergency, to dispatch all generating units as necessary and technically possible to maintain the reliability of the system. Fifth, the system operator should be responsible for collecting information on power plant emissions associated with system dispatch (see Section VIII). Sixth and finally, open access to the transmission system and fair, economically efficient, and non-discriminatory pricing are necessary prerequisites to the operation of an efficient bulk power system (see Section IV). A

³¹ This is not to preclude some later evolution or expansion of the control area, for example to accommodate integration with the New York Power Pool.

system with these essential features would build upon the existing bulk power system in New England in the evolution towards a more competitive industry structure, and would preserve the benefits that consumers as well as industry participants enjoy from the coordinated operation of the bulk power system. Two of these features, the independence of the system operator and the reliability of the system, merit further discussion.

The first of these, the independence of the system operator from market participants, is critical to the establishment of full and fair competition.³² The objective of restructuring must be to create conditions that will allow genuine competition to thrive and provide benefits to consumers. Only if the bulk power system is operated without undue influence from suppliers in the generation market or from owners of transmission will retail consumers be able to reap the lower cost benefits of a restructured industry.

Efficient competition cannot be assured by allowing limited groups of market participants to dominate the decision-making process that affects the operation of the bulk power system. Suppliers and customers have divergent interests. All power suppliers would benefit from the overpricing of electricity that could arise from activities such as the control of the transmission system by any generator or group of generators, or the calculated delay of transmission improvements that results in transmission constraints. The primary goal of restructuring is for all consumers to benefit from the lower costs that efficient competition can offer. Because all

³² The importance of this independence is presented in the "Declaration of Independence," which the Department has endorsed. "A Declaration of Independence: Why Transmission and System Operation Must Be Truly Independent from the Ownership of Generation." October 21, 1996. Signed by 22 Public Utility Commissioners from twelve states.

power suppliers could benefit from higher prices, suppliers should not have control over transmission and system operation.

A system operator that merely implements rules established by market participants, and is entrusted with a limited scope of functions, cannot facilitate an efficient and openly competitive generation market. Rather than operating under the control of owners of generation and transmission, the ISO should answer to consumers through appropriate regulatory oversight, and should be subject to incentives for good performance. Regulatory oversight should strive "to harmonize the interests of the ISO with those of the public: reliability and stability, low generation and transmission prices, and minimum environmental impact" (Declaration of Independence at 2).

In the May 1 Statement, the Department stated that separation of the PE's merchant function from the ISO's reliability function could avoid problems related to market power and affiliate transactions. After considering testimony in hearings and written comments, the Department concludes that the PE may, but need not, be separate from the ISO. Separation of the ISO and the PE could provide some advantages in terms of avoiding market power concerns and market manipulation; however, any advantage is likely to be minimal once a truly independent system operator, as discussed in the previous paragraphs, is established.

The second essential feature of the bulk power system that merits additional discussion is the reliability of the system. The Department has repeatedly emphasized that restructuring must preserve the level of reliability that customers have traditionally enjoyed. Reliability depends upon system security and resource adequacy. System security refers to the integrity of the interconnected transmission network and the avoidance of uncontrolled cascading failures which

may result in widespread outages. It depends on maintaining a continuous and instantaneous balance between supply and demand and having the ability to adjust generation or load quickly to relieve strains on system security. Failures in service associated with system security arise from system operating practices, system design errors, control equipment capability, or system malfunctions. Resource adequacy refers to having sufficient generating capacity to be able at all times to meet the aggregate electric peak loads of all customers and supply all their electric energy requirements. Failures in service associated with resource adequacy arise from an insufficient level of generating capacity that can be due to errors in load or capacity availability projections or to construction delays.

In the past, the electric industry has provided reliable electric service pursuant to reliability criteria, planning policies and operating practices established by NERC, a voluntary industry organization. Consistent with NERC's direction, NEPOOL and its members have ensured resource adequacy through conformance to a criterion stating that the expectation of disconnecting non-interruptible customers will be no more than once in ten years. Similarly, NEPOOL and its members have ensured system security by designing and operating the bulk power system to a specified level related to the likelihood that reasonably foreseeable contingencies would not result in the loss of a major portion of the system.

For current levels of reliability to be preserved, both resource adequacy and system security must be maintained in a restructured industry. There are encouraging signs that reliability will be preserved.

First, NERC is reviewing its role in a restructured industry and considering how it should evolve consistent with trends in the industry. A NERC task force has concluded the following:

(1) NERC should continue to establish technically-based standards for security and adequacy; (2) control area operators must be responsible for system security and must have authority to enforce compliance with standards; (3) NERC must establish formal mechanisms (rather than relying on peer pressure) to ensure compliance with NERC policies and standards pertaining to system security; and (4) participants in competitive generation markets must be responsible for resource adequacy and must be subject to market-based compliance mechanisms (e.g., monetary penalties, required load-shedding, or loss of trading privileges in the market for non-compliance). See Future Course of NERC, Accepted by NERC Board of Trustees, September 16, 1996.

In addition, FERC is considering whether voluntary compliance with NERC rules and guidelines should be replaced with mandatory NERC operating and reliability standards. See, e.g., "Reliability Might Have to be Mandatory, Hoecker Suggests, as Complexity Grows," Electric Utility Week, October 14, 1996. Finally, revisions to the NEPOOL Agreement are likely to give the ISO the authority and tools to maintain system security, and require that each participant bear a proportional responsibility for system security and resource adequacy. Under the current version of the NEPOOL reform proposal, the ISO has authority to take emergency actions to preserve system security, and to take action against a NEPOOL participant who imperils the safety or reliability of the NEPOOL control area. In addition, each participant has an Installed Capability Responsibility for each month and Operable Capability Requirement for each hour, and would pay/receive a market-clearing price for deficiencies/surpluses in either. It is important to note that, with respect to resource adequacy, NEPOOL's most current proposal is a change from current practices, and is intended to reflect the dynamics of a competitive generation market.

We anticipate that system security will continue to be ensured through established policies, criteria, and compliance procedures. In a mature and competitive generation market, however, the need for resource adequacy standards could be eliminated. Resource adequacy could be ensured entirely through the operation of market forces as price signals foster a dynamic balance between supply and demand.

The Department will participate in regional efforts and in any FERC proceeding on proposed revisions to the NEPOOL Agreement or an ISO to ensure that security and adequacy provisions are sufficient. We will also encourage the expanded use of market forces, where appropriate, to ensure resource adequacy as efficient competitive markets develop.

We continue to believe that the benefits of a restructured industry should be available to all consumers without undue delay. The Department will continue to work toward January 1, 1998 as a reasonable goal for retail competition. In addition, we plan to work in cooperation with the Legislature, neighboring states, and federal authorities to achieve our objective of lowering electricity costs through retail competition in the electric industry. The independence of the system operator from the owners of generation and transmission is a necessary foundation of a competitive generation market; without a truly competitive generation market, the full benefits of retail competition may not be achieved for consumers.

SECTION IV -- TRANSMISSION PRICING

In this section, the Department considers the role of transmission pricing in a competitive electric industry. The Department recognizes that efficient transmission pricing is a prerequisite to achieving the full measure of benefits contemplated by competitive generation. An efficient transmission pricing system would send proper price signals, promote efficient siting and investment decisions, and provide equitable treatment for market participants. As competition in generation emerges, necessary adjustments to the transmission pricing system should be considered to ensure that the efficiencies expected from the competitive generation sector are realized.

While the current pricing system recovers the fixed costs of transmission facilities, it provides few incentives to promote efficient use of transmission resources. The key element needed to promote efficient use -- price signals -- is lacking. Prices should reflect costs that arise when transmission is constrained, or unable to simultaneously accommodate all of the generation transactions that are desired in a particular location. Formal recognition of such "congestion costs" would provide important economic information to developers of new generation and transmission owners, including where best to site new generation and where to enlarge transmission facilities. In addition, locational congestion costs can more accurately inform targeted DSM and distributed generation decisions.

The Department supports a transition over time to a form of transmission pricing that is more sensitive to the locational effects of transmission constraints than the current pricing system. However, if transmission constraints persist at a particular location, a generator may be able to command an exorbitant price for its services. In such "load pocket" situations, the Department recommends pricing that will ensure reliable service at a reasonable cost.

Transmission pricing is jurisdictional to FERC, thus, our views are presented on an advisory basis. Still, the Department maintains a substantial interest in seeking transmission pricing methods that will be compatible with an efficient industry. The views we present here establish the basis for positions we expect to take in relevant federal regulatory proceedings and related inquiries. In Massachusetts, the Department plans to work with parties to redefine transmission and distribution facilities as requested by FERC in Order 888. Because transmission pricing is jurisdictional to FERC, the Department makes no request to the Legislature for legislative changes pertaining to transmission pricing.

SECTION IV -- TRANSMISSION PRICING

A. Introduction

In this section the Department addresses the role of transmission pricing in a competitive industry, focusing particularly on efficient pricing, transmission load pockets, and open access and comparable pricing.³³

In D.P.U. 95-30, the Department noted the importance of pricing mechanisms designed to promote efficient use of the transmission system. D.P.U. 95-30, at 29. In addition, the Department identified key principles to guide restructuring, two of which pertain to transmission pricing: (1) ensure full and fair competition in generation markets, and (2) functionally separate generation, transmission, and distribution services. Id. at 15-17.

Efficient pricing of the transmission system is warranted for several reasons. First, efficiency implies providing goods and services at the lowest possible cost. Because of the interrelatedness of transmission and generation in the bulk power market, cost minimization will only be attained when an open, competitive generation market is supported by an efficient system of transmission pricing. Timely and accurate cost information provided by an efficient transmission pricing system would inform the competitive market. For example, new, low-cost generators would see competitive opportunities in locations where their facilities could replace

³³ Open access and comparable transmission pricing focus on an electric company's own uses of the transmission system. FERC Order 888, at 36-37. Open access and comparable transmission has been described by FERC as a system of transmission tariffs that "should offer third parties access on the same terms or comparable basis, and under the same or comparable terms and conditions, as the transmission provider's uses of its system." Id.

higher-cost generators or relieve transmission constraints. Replacement of high-cost generators with low-cost ones would tend to benefit consumers in that area. Similarly, price signals reflected by an efficient transmission pricing system would provide incentives for end-use consumers and energy efficiency providers to consider implementation of cost-effective energy efficiency technologies. Second, an efficient pricing system would promote better utilization of existing transmission facilities. Better utilization promotes deferral of capital expenditures in transmission facilities, avoiding financial and environmental impacts. In certain cases, better utilization may eliminate the need for a new transmission facility. Finally, efficient transmission pricing should be addressed, to the greatest extent possible, in parallel with movement towards a competitive generation sector. Progress in one area and not the other is unlikely to yield satisfactory results given the interrelated character of generation and transmission.

In addition to efficient transmission pricing, the Department has consistently recognized the importance of fairness for users of the transmission system. May 1 Statement at 18-22; D.P.U. 95-30, at 21-24. Restrictions on access to transmission services and unfair pricing arrangements create an undue competitive advantage for some participants. If transmission ownership is misused so as to hinder competition, then consumers could face fewer choices and higher costs. The Department sees a fair and non-discriminatory transmission pricing regime as an essential underpinning of a competitive market.

In the May 1 Statement, the Department provided our preliminary position on transmission jurisdiction. May 1 Statement at 18-22. The Department noted that an important step in the transition to consumer choice involves reevaluating the existing jurisdictional boundaries between state and federal regulators. *Id.* at 18-19. In the past, FERC regulated the

portion of transmission used for wholesale and interstate commerce sales while state regulators regulated bundled retail service, which included the transmission, generation, and distribution facilities used on behalf of retail customers. With consumer choice, these three elements of retail electric service will be unbundled or separated from one another. Once transmission has been unbundled and consumer choice has been implemented, FERC anticipates taking jurisdiction for transmission.³⁴

The Department's view is that transmission should be regulated by FERC, including unbundled interstate transmission under state-authorized consumer choice. We believe that oversight of transmission by a single, federal entity will provide necessary ratepayer protection, and should prove less cumbersome than a system of piecemeal regulation by the individual states. In addition, courts have affirmed federal jurisdiction over matters of interstate commerce. United Distribution Companies v. Federal Energy Regulatory Commission, 88 F.3d 1105 (D.C. Cir. 1996). Regulation of distribution would remain with state regulators.

In anticipation of the need to clarify jurisdictional boundaries between state and federal regulators, FERC developed a seven-part test to distinguish electric company transmission and distribution facilities, and thereby resolve questions of jurisdiction. FERC Order 888, at 400-442. FERC has also stated its willingness to defer to recommendations of state regulators regarding the classification of transmission and distribution facilities based on applications of its seven-part test. Id. at 437-438.

³⁴ In anticipation of consumer choice, FERC analyzed its authority to oversee transmission in this context. FERC Order 888, at 157-158, 439-440, App. G. According to FERC's analysis, its jurisdiction extends to all unbundled transmission service in interstate commerce whether that service is provided for wholesale or retail customers. Id.

Therefore, to maintain progress toward implementation of consumer choice in Massachusetts, we now direct electric companies in Massachusetts to file with the Department, by March 3, 1997, analyses supporting classifications of their transmission and distribution facilities based on an application of FERC's seven-part test.

B. Issues Raised

Commenters generally agreed that a locational transmission pricing method would send important price signal information (Tr. 2, at 19-21, 32-33, 66-67). In particular, locational transmission pricing was seen as an effective means to indicate where best to site new generation or to enlarge transmission facilities³⁵ (*id.*). In terms of load pockets, commenters expressed concerns that a generator operating in a load pocket could take advantage of its monopoly position and charge excessive prices in a fully deregulated environment³⁶ (AIM August 2, 1996 Comments at 12; CPC August 2, 1996 Comments at 31; DOER August 2, 1996 Comments at 9-10; EEC0 August 2, 1996 Comments at 2; FG&E August 2, 1996 Comments at 5; MEC0 August 2, 1996 Comments at 25; WMEC0 August 2, 1996 Comments at 8).

C. Current Department Proposal

³⁵ In this discussion, locational transmission pricing is understood as reflecting dissimilar generation prices, from location to location, which may result when the transmission system is constrained (Tr. 2, at 30-32).

³⁶ Transmission load pockets are locations on the transmission grid that have limited transmission capacity such that a specific generating unit must operate to ensure system reliability in that location. Load pockets can provide an opportunity for that generator to exercise market power and charge monopoly prices. Therefore, pricing of generation in load pockets will require regulatory oversight.

1. Efficient Pricing

The transmission system is highly dynamic, interacting constantly with generators in response to fluctuating load conditions. Generator output must be conformed to the transmission capacity available or serious damage to transmission components may result. Conversely, the level of transmission capacity available is directly related to generator output.³⁷ Yet, the traditional method of pricing transmission does not reflect these interactions.

If transmission capacity is insufficient in a particular location, then transmission is said to be constrained at that location, and as a result generator output may have to be adjusted to avoid overloading transmission lines. This type of adjustment may increase short-run costs when the operations of generators with low short-run variable costs are restricted by the constraint. In such a circumstance, higher-cost generators may have to be dispatched so that consumers will

³⁷ Transmission and generation interactivity can be understood in terms of power flow behavior and transmission limits. In electric networks, power flows in inverse proportion to the impedance of the wires. This means that power flows everywhere in a network based on the relative resistance of wires in that network. The lower the resistance of a wire, the greater the amount of power that will "choose" to flow on that wire. In interconnected transmission systems, this effect, where power flows throughout the system, is known as "loop flow." When a transmission line is already fully loaded, *i.e.*, carrying power at its maximum capacity rating, then that transmission line cannot safely accommodate any additional power. Yet, power supplied from a generator elsewhere on the interconnected transmission system -- supplied perhaps in response to rising load or unit availability -- will nevertheless "invade" that line, consistent with flow behavior in a network. In that case, it would be necessary to adjust the output of one or more of the generators affecting this line to ensure that the integrity of the transmission line is protected. Thus, the interconnected electric system must be continuously balanced in terms of transmission capacity, generator operations, and load requirements so that system reliability can be maintained. Continuous balancing and system reliability are the primary responsibilities of the system operator.

continue to receive service without disruption.³⁸ The costs that result from rearranging generator output in light of such a transmission constraint are known as congestion costs. In a competitive environment with a locational pricing system, the market price for power at the constrained location would increase commensurate with the use of higher-cost generators. This increase would represent the costs of congestion at that location.

When transmission lines are unconstrained, generators can be dispatched freely according to their short-run variable costs. There is no transmission limit requiring a modification of generator operations and there are no congestion costs. During many hours of the year, at many locations, this situation would be expected. In such situations, a locational pricing system would show no price difference between locations.

Traditional transmission pricing recovers the fixed costs of transmission facilities. Under traditional ratemaking principles, an electric company's native load customers have been held responsible for the costs of its transmission facilities.³⁹ Transmission facilities are accounted for on an embedded or average cost basis. That is, when an electric company undertakes a capital

³⁸ In many cases, accepting the short-run costs associated with rearranging generator output would be preferable to a capital investment in transmission capacity. Over a given period of time, the expenditures necessary to support a transmission capacity enlargement may greatly exceed the periodic costs of rearranging generation. In such circumstances, a capital investment would clearly be detrimental to consumers.

³⁹ An electric company's native load consists of the residential, commercial, and industrial customers located within that company's service territory. When a third party such as a non-utility generator uses an electric company's transmission system, *i.e.*, "wheels" power through that system, it pays a FERC-regulated wholesale transmission charge. Such monies accumulated from third-party wheeling are used to reduce the fixed costs of the transmission system, effectively reducing the cost burden otherwise borne by a company's native load.

investment in new transmission facilities, the costs are generally rolled into an electric company's rate base and averaged within the company's customer classes.⁴⁰ Generation costs have been averaged across an electric company's native load customers as well.

While fixed cost recovery is important, and must be one of the net results of any transmission pricing system, the competitive electricity market requires more than fixed cost transmission pricing if it is to achieve an efficient level of operation. Traditional pricing provides little in the way of information, or price signals, regarding the actual use of the transmission system.⁴¹ While it has been recognized that transmission is subject to constraints, and that locations are subject to price differences under conditions of constraint, the traditional pricing method does not capture this information.⁴²

⁴⁰ FERC has allowed for certain exceptions to rolled-in cost treatment. When transmission is constrained and the utility builds new facilities to relieve the constraint the utility may charge for transmission at a rate not to exceed the higher of (1) rolled-in costs including the costs of the new facility, or (2) the incremental cost of the new transmission facility. Pennsylvania Electric Company, 60 F.E.R.C. ¶ 61,034. When transmission is constrained and a utility chooses not to build, the utility may charge for transmission at a rate not to exceed the higher of (1) rolled-in costs, or (2) opportunity costs capped at the utility's imputed incremental cost of expanding its transmission system. Id. FERC will allow utilities to charge third parties an incremental cost rate if it can be shown that a transmission expansion would not have been needed but for the third-party's request for service. Northeast Utilities Service Company, 58 F.E.R.C. ¶ 61,070.

⁴¹ As a general matter, in NEPOOL, congestion costs have been borne by the entitlement holders of the generator that is restricted by a transmission constraint. While this method accounts for the costs of congestion, it is not at all clear that it allocates these costs in a way designed to promote economic efficiency.

⁴² In recognition of this lack, FERC, the regulatory authority overseeing transmission pricing, has initiated proposals such as its Capacity Reservation Tariff Notice of Proposed Rulemaking. Capacity Reservation Open Access Transmission Tariffs, Notice of Proposed Rulemaking, 75 F.E.R.C. ¶ 61,079. Price signal proposals have also been submitted to FERC by electric companies in California as part of that state's electric industry restructuring effort.

Shortcomings associated with the traditional pricing method may be remedied by adding a congestion cost and locational pricing component to the traditional pricing method.

Transmission pricing would then consist of two major parts: (1) fixed cost charges designed to recover the costs of the transmission facilities, and (2) a location-sensitive component designed to disclose the costs of constraints on the transmission system on a real-time basis. Fixed cost charges would be established by regulation much as they are today. The location-sensitive component could reflect market conditions in a particular location or zone, depending on how this component could best be structured.

A location-sensitive pricing method would promote efficient decision-making. For example, consumers in a location that is subject to a transmission constraint may face a higher locational market clearing price than consumers in an adjacent, unconstrained area.⁴³ If so, the difference in prices between those two areas would be captured by location-sensitive pricing. Using the information conveyed by location-sensitive pricing, investors could evaluate the merits of siting a new generator; other options such as a transmission upgrade, energy efficiency, self generation, and interruptible rates could be analyzed more accurately as well.⁴⁴ Since price signals

⁴³ The costs of transmission constraints are reflected in the market-clearing price for generation on either side of a constraint. In a simple example, if the price for generation on the upstream side of a constrained transmission line is three cents, and the price on the downstream side of the constraint is four cents, then the cost of the constraint, or the congestion cost, is one cent. Theoretically, consumers in the four cent location would be willing to pay for a transmission upgrade if that could be done for one cent or less, on average. The difference in market-clearing prices, or the one cent amount in this example, is the price signal that informs the market and leads to economically efficient outcomes.

⁴⁴ For example, congestion costs provide price signals regarding transmission expansion.
(continued...)

seen by investors would reflect actual costs, only projects that had a high probability of providing service at lower cost would be expected to go forward. Thus, investors would have strong incentives to strive continually to develop and implement lower-cost proposals, promoting economic efficiency.

The Department has concluded from this rulemaking investigation that the benefits of competition in generation will be maximized if competition is implemented in conjunction with a form of location-sensitive pricing. Such a pricing system could be based on congestion costs, or a similar mechanism, designed to reflect the costs of transmission constraints. The overall rate design should ensure that the fixed costs of the transmission system are recovered while providing incentives to encourage cost-effective expansion.

An abrupt introduction of a location-sensitive pricing method based on congestion costs could expose consumers to price volatility. Thus, the Department recommends that a transition period be included in any location-sensitive transmission pricing proposals that Massachusetts electric companies formulate for submittal to FERC. At the same time, the Department encourages the active consideration of a location-sensitive transmission pricing method. We note that failure to pursue a location-sensitive transmission pricing method could, within the reasonably foreseeable future, foster inefficiencies and contribute to system reliability concerns.

2. Transmission Load Pockets

⁴⁴(...continued)

Consumers downstream of a constraint (faced with additional costs) and generators upstream of the constraint (willing to sell low-cost power but unable to access the market in the constrained area) have an economic incentive to remove the constraint. If expected congestion costs exceed the costs of the transmission expansion, these parties have an incentive to make an economically efficient investment in new transmission facilities.

A transmission load pocket is a location where, by virtue of geography or the pattern by which the bulk power system has been developed and constructed over time, transmission capacity is limited such that a specific generating unit must operate to ensure system reliability in that location.⁴⁵ The owner of a generating unit in a load pocket may have considerable opportunity to exercise market power during periods when transmission capacity is constrained. Because system reliability in the load pocket depends on that generating unit, its owner could, at times, under conditions of total price deregulation, command an exorbitant price.

Accordingly, the Department recognizes that load pockets require special regulatory attention. Generators serving load pockets effectively function as an integral part of the monopoly transmission system and should be regulated as such. The Department will recommend that FERC establish pricing methods for generators in load pockets that address monopoly concerns. Generators in load pockets might, for example, be subjected to a form of embedded-cost pricing that allowed them to collect their cost of service on an annual basis while charging market prices during unconstrained periods. In this way, consumers in load pocket areas could be assured of system reliability and reasonable costs. The Department notes its interest in working with interested parties in Massachusetts to address this issue.

3. Open Access and Comparable Transmission Pricing

Access to markets is a fundamental precondition of effective competition. In the electric industry, access to markets is provided by access to transmission. Efficient competition in the

⁴⁵ During periods of excess transmission capacity, such as low-load periods, few if any load pockets would be expected. However, as loads increase during a day or season, then load pockets may routinely appear such that a specific generating unit must operate. The location of load pockets may vary depending on loads and generating unit availability.

electric industry would not be attainable under conditions of restricted transmission access, since some competitors would be shut out of the marketplace. Fair pricing for transmission services is also fundamental to a competitive electric industry. It is for these reasons that FERC has recently required transmission-owning public utilities to file open access and comparable transmission tariffs. FERC Order 888, at 1-51. Specifically, FERC has required transmission owners to file transmission tariffs that make transmission charges visible, that include terms and conditions applicable to all parties, and that apply to transmission owners themselves when purchasing or selling electric energy at wholesale. *Id.* at 152-252, App. D. In addition, FERC has required tight power pools, including NEPOOL, to file an open access and comparable pool-wide tariff by December 31, 1996.⁴⁶ *Id.* at 270-271. FERC has required that, by March 1, 1997, pool-wide transmission services within tight power pools begin to operate under open access and comparable tariffs.⁴⁷ *Id.* Open access and comparable transmission pricing is central to competition because it does not discriminate between transmission owners and transmission customers. Under open access and comparable pricing, transmission owners are not afforded a competitive advantage by virtue of transmission ownership. Competition is advanced because

⁴⁶ FERC identified four tight power pools: NEPOOL, the New York Power Pool, the Pennsylvania-New Jersey-Maryland Interconnection, and the Michigan Electric Coordinated System. FERC Order 888, at 270. Tight power pools are generally contiguous electric companies that coordinate the dispatch of their generators.

⁴⁷ Certain NEPOOL transmission arrangements such as low-cost Pool Planned Unit ("PPU") transactions predate FERC's open access and comparable tariff policies. The Department supports the continuation of existing PPU transmission arrangements so long as the entitlement in the PPU is held by the original owner. May 1 Statement at 21-22. If the entitlement in the PPU is sold by the original owner, then FERC should require that the PPU transmission arrangement be forfeited. Otherwise, an unfair advantage in the competitive market would be perpetuated.

parties face the identical price for their transmission use whether they own the transmission facilities or not. Consistent with FERC Order 888, the Department considers a fair and non-discriminatory transmission pricing system an essential underpinning of the competitive market.

SECTION V -- MARKET POWER

In this section, the Department discusses the potential for the abuse of vertical and horizontal market power in a less closely regulated electric industry. Vertically integrated electric companies could slow the development of a robust market for generation, through their ability to control simultaneously the generation, transmission, and distribution of electricity, and thereby influence prices to their own benefit. A robust market also depends on a sufficient number of buyers and sellers to ensure competitive behavior, with no supplier or small group of suppliers being able to influence prices through the abuse of horizontal market power.

The Department is committed to establishing a framework to minimize the potential for vertical market power abuse. To this end, the Department prefers that electric companies voluntarily divest generation assets. Without complete divestiture, electric companies must form separate corporate marketing affiliates, and create separate, competitive divisions within integrated companies that contain regulated divisions in order to limit the potential for market power abuse.

The other dimension of the market power problem discussed in this section is horizontal market power, which could arise from undue concentration in the ownership of generation facilities such that one or a few market participants could influence generation prices to their own benefit. Although a number of commenters contended that there is not a sufficient concentration in the existing pattern of generation ownership in New England to cause concern, others felt that there would be opportunities to exercise horizontal market power in select areas, such as in individual service territories, or within particular market segments, without adequate Department oversight. In addition, mergers involving larger companies could increase the potential for excessive concentration in generation.

In order to minimize the potential for vertical market power abuse, the Department will apply corporate rules of conduct to govern the relationship between the regulated companies and their competitive affiliates. With regard to horizontal market power, while we remain receptive to merger proposals that could strengthen smaller companies and achieve overall ratepayer savings, we plan to evaluate carefully any proposed mergers within our jurisdiction and, particularly with mergers involving larger companies, to assess their potential to introduce an excessive degree of concentration in the generation market. Although we do not have the authority to mandate regional solutions, we will continue to work with the other Public Utilities Commissions in New England to advocate before the FERC for an effective ISO that will ensure robust competition in New England and that will minimize the potential undue competitive advantage of incumbent utilities.

SECTION V -- MARKET POWER

A. Introduction

The Department is committed to establishing a framework in which the potential for both vertical and horizontal market power abuse will be minimized. Some of the most challenging issues in the restructuring of the Massachusetts electric industry arise from the fact that the new retail services market is not being created de novo, but rather is emerging from a backdrop of several decades of monopoly regulation. Existing and longstanding patterns of commerce create hurdles to competition that must be overcome. As in any nascent competitive market emerging from such a backdrop, those electric companies that have enjoyed a monopoly position cannot be expected to forgo willingly the advantages that monopoly status afforded them in the past. If they continue to have the ability to tie the purchase of one service or product to the purchase of another, to market one product or service while selling another, to share information not generally available to their competitors, or to cross-subsidize regulated and unregulated operations, they will have the ability to influence prices in an uncompetitive manner, and might slow the development of a robust market for generation. To address this potential for vertical market power abuse, we discuss corporate structure and the rules of conduct that will govern interactions between the regulated and competitive divisions or affiliates of electric companies.

In addition, the prospect of an unregulated generation market raises concerns about the abuse of horizontal market power, where one or a few owners of generation, either because of their size or location, could influence generation prices to their own benefit.

We recognize that potential market power problems extend beyond Massachusetts borders, and we are therefore committed to working with other entities at the state, regional, and national

levels to ensure a robust competitive market with broad geographic scope and low barriers to participation, so as to diminish the potential for this type of abuse.

B. Vertical Market Power

1. Introduction

In D.P.U. 95-30, the Department stated that

[g]eneration, transmission and distribution services within the [electric] industry must be functionally separated in order to move to a fully competitive generation market based on customer choice.... The functional separation of generation from transmission and distribution services is a necessary first step to address market power issues and limit a company's ability to provide itself an undue advantage in buying or selling services in competitive markets.

Id. at 16. Although we declined to endorse mandatory divestiture of generation or transmission assets in that Order, in the May 1 Statement, we did state our opinion that divestiture of generation assets by the electric companies would provide the cleanest solution to the potential problem of anticompetitive affiliate transactions, and that a post-divestiture market structure characterized by arm's-length transactions among generators, the ISO, and distribution companies would require the least regulatory supervision. May 1 Statement at 27.

As discussed earlier, the Department envisions a truly independent regional transmission system operator who will have control over the dispatch of generation and over system reliability through operation of the transmission grid. This structure, under FERC regulation, should go far in minimizing, if not eliminating, the potential for abuse of vertical market power by an integrated company through transmission pricing. However, concern over a company's ability to manipulate the price of generation or other products or services remains. In this discussion, we

focus on the potential for a vertically integrated electric company to abuse market power based on its common control of the generation, distribution and marketing of electricity.

The Department on May 1 proposed to require, in the absence of divestiture, the creation of separate subsidiaries for generation, transmission, marketing, and distribution within one holding company, along with realistic, enforceable rules regarding affiliate transactions.⁴⁸ May 1 Statement at 26-27. We also stated that, while we would encourage each electric company to propose a structure that would suit its circumstances, we believed that the holding company structure was the minimum acceptable approach. We also urged electric companies to modify their corporate structures as a condition for reduced regulation of the generation function. We listed a range of options for corporate restructuring, ranging from complete divestiture of generation assets, to a holding company structure such as that described above, to separate divisions within one corporate entity with communications "firewalls" between them to limit anticompetitive information flow. We pointed out that the level of regulatory supervision

⁴⁸ The Department notes that the FERC has concluded that functional unbundling of wholesale services is necessary to implement non-discriminatory open access transmission, and that corporate unbundling should not now be required. The FERC states that functional unbundling means three things: (1) a public utility must take transmission services (including ancillary services) for all of its new wholesale sales and purchases of energy under the same tariff of general applicability as do others; (2) a public utility must state separate rates for wholesale generation, transmission, and ancillary services; and (3) a public utility must rely on the same electronic information network that its transmission customers rely on to obtain information about its transmission system when buying or selling power.

In addition, the FERC realized that additional safeguards are necessary to protect against market power abuses and required that a strong code of conduct be in place (including a requirement to separate employees involved in transmission functions from those involved in wholesale power merchant functions). FERC Order 888, at 57-58.

necessary to avert market power abuse was likely to correlate largely with the degree of corporate separation. Id. at 25-26. Yet another option explored in hearings was the establishment of a separate marketing affiliate in cases where an electric company chooses to retain ownership of generation assets and plans to offer power in the competitive marketplace.

In the following discussion, we focus on the options for corporate structures that will enhance the development of a competitive market; we address the jurisdictional authority of the Department to order electric companies to divest themselves of generation assets or to form separate affiliates; and we discuss possible changes in legislation that may be required for the Department to effect modifications to corporate structure or to impose penalties for violation of the corporate rules of conduct. We also reiterate, as we stressed in the May 1 Statement, that certain anticompetitive behavior by affiliates could subject a company to prosecution under the state or federal antitrust statutes.⁴⁹ Id. at 27-28.

2. Issues Raised

Several commenters recommended that the Department endorse divestiture of generation assets by the electric companies to discourage the abuse of vertical market power (DOER April 12, 1996 Comments at 16-20, Tr. 3, at 153-154; APS May 24, 1996 Comments at 3, 4, 6; CPC May 24, 1996 Comments at 9; Tr. 3, at 79). Others suggested that financial incentives could be used to encourage integrated electric companies to divest or spin off generation and transmission assets (CLF May 24, 1996 Comments at 7-8; CPC May 24, 1996 Comments at 28-30). Still others contended that the Department has no authority "to adopt measures designed solely to

⁴⁹ The antitrust laws include the Sherman Act, 15 U.S.C. §§ 1-7; the Clayton Act, 15 U.S.C. §§ 12-27; and the Massachusetts Antitrust Act, G.L. c. 93, §§ 1-14A.

cause a utility to do that which the Department could not order directly" (BEC Co August 2, 1996 Comments at 15-17). FG&E focused on the necessity for divestiture (or at least the relinquishment of all effective control) of transmission assets by the owners of generation, and on the necessity of breaking the link between electric distribution and electric retail marketing (FG&E May 24, 1996 Comments at 2, 4-7). Eastern Edison suggested that partial divestiture of generation assets would be more effective in meeting the Department's concerns regarding vertical market power abuse than would full divestiture (EECo July 8, 1996 Comments). Eastern Edison contended that full divestiture would have large costs and risks, such as the possibility of creating fire-sale prices, increasing the likelihood that customers would pay twice for the same assets should the spot market price rebound; the likelihood of a forced refinancing of corporate debt if too much collateral is withdrawn; high investment banking fees and other divestiture fees; and performance difficulties in providing basic service if a fully functioning spot market is not immediately available (*id.*).

The Department notes that two companies have, in fact, made divestiture proposals. COM/Electric has proposed to divest itself of all of the generation entitlements owned by its retail electric affiliates, Commonwealth Electric Company and Cambridge Electric Light Company (COM/Electric April 12, 1996 Comments at 4, citing COM/Electric's February 15, 1996 filing, "Competitive Challenge"). Also, in an offer of settlement between the Attorney General and MECo, *et al.*, submitted to the Department on October 1, 1996, and currently pending review by the Department, MECo agreed that its wholesale power affiliate, New England Power Company, would divest itself of all generation assets as part of MECo's proposal to restructure (D.P.U. 96-25, Exh. MECo-1, at 28-29).

Several commenters contended that the Department's proposal in the May 1 Statement for creation of separate corporate entities for generation, transmission, marketing, and distribution within a holding company was more "draconian" than necessary, and that effective results could be achieved through functional separation within any single, integrated electric company with both competitive and regulated divisions, as long as there were rules to constrain how the divisions interact (Tr. 3, at 8-9, 16; CPC May 24, 1996 Comments at 24-28). The vast majority of commenters agreed that, at a minimum, the functional separation of generation, transmission, and distribution with corporate rules of conduct to regulate the interactions among the functions was a reasonable and necessary approach (WMECo May 31, 1996 Supplemental Comments at 7; BECo May 24, 1996 Comments at 19; Attorney General May 24, 1996 Comments at 14).

Specifically, WMECo contended that functional unbundling with appropriate operating rules would be the most effective means to accomplish the separation sought by the Department. WMECo stated that protection against the possible abuse of the existing integrated relationship could be accomplished adequately by (1) implementing a code of conduct for separate divisions, (2) establishing a communication mechanism that would provide equal access to relevant information to all market participants, and (3) establishing terms and conditions of service to which the regulated entity would provide access on a non-discriminatory basis (WMECo May 31, 1996 Supplemental Comments at 7-9). In addition, several electric company commenters argued that any requirements related to corporate reorganization ordered by the Department should be the least intrusive course of action consistent with the goal of promoting competition, and that corporations should determine for themselves the structures that would best meet their needs

within bounds established by the Department (BECo August 2, 1996 Comments at 13-14; Tr. 3, at 70, 176).

DOER vigorously disagreed with the companies' contention that functional separation would be sufficient to mitigate the potential for market power abuse, and argued that the opportunities for exercising this abuse would be difficult to monitor or prevent (DOER April 12, 1996 Comments at 17-19). DOER contended that functional separation alone would fall short of meeting the goal of full and fair competition, because a profit-maximizing distribution company in a corporation with a competitive division would have an incentive to engage in subtle forms of anticompetitive behavior such as providing favored access to generation or retail marketing affiliates, or maintaining obstacles to information or to distribution access by its competitors (*id.* at 17).

However, most commenters on the subject agreed that creation of a separate marketing affiliate with corporate rules of conduct to govern the relationship between it and the regulated divisions of the company would suffice to control anticompetitive behavior (Tr. 3, at 239-240; Tr. 14, at 128-129). On this point, WEPCo commented that "incumbent utilities should either be barred from competing in the territories they currently control or be required to spin off to shareholders any retail marketing affiliate as a separate company" (WEPCo August 2, 1996 Comments at 6).

All commenters on the issue agreed that, in order to minimize the potential for market power abuse by vertically integrated electric companies, the Department would need to issue a clear and comprehensive set of corporate rules of conduct to regulate the relationships between the monopoly, regulated divisions of a company and the competitive, unregulated divisions within

the same company (Tr. 3, at 15-16, 67, 70, 104-105, 162-163, 154-155, 164, 167-169, 170-171, 209-210). There were some specific suggestions for minor changes in the draft rules of conduct initially proposed by the Department on May 1, which are discussed below (Tr. 3, at 39, 218-219, 221-227). In addition, CPC recommended that the Department include in the rules a general prohibition against the abuse of market power, without detailing the sanctions that might result from a violation of the prohibition (Tr. 3, at 36-37).

3. Current Department Proposal

The FERC's rule mandating open access to the transmission system through non-discriminatory, comparable transmission tariffs will go a long way toward assuring generators an equal opportunity to compete on a regional basis.⁵⁰ However, competitors and consumers might still face the risk of anticompetitive pricing on a local level if electric companies were allowed to retain generation assets and at the same time compete to sell power through their distribution company divisions. As we observed in the May 1 Statement at 25, "[m]odifying the structure and rules of the bulk power system, while maintaining existing corporate structures, may not be sufficient to curtail the potential for abuse of market power and associated decreases in the economic efficiency of competition without a burdensome and costly level of regulatory oversight." Thus, the Department continues to encourage the voluntary divestiture of generation assets by the electric companies to protect against self-dealing and vertical market power abuse, to minimize the future regulatory burden on themselves, and to further the reality, as well as the appearance, of full and fair competition.

⁵⁰ FERC Order 888, at 57-58.

Based on comments received, the Department is firmly persuaded that the functional separation of generation, transmission, and distribution divisions within an integrated company, with clear, enforceable corporate rules of conduct to govern how the divisions interact, is the minimum acceptable approach to corporate structure for the electric companies. Moreover, each electric company that retains generation assets, and plans to sell power in the competitive marketplace, must establish a separate marketing affiliate in order to minimize the potential for the unregulated portion of the business to be subsidized or provided with a competitive advantage by virtue of its connection to a ratepayer-funded entity. Even with full divestiture of generation assets and/or formation of separate marketing affiliates, we remain sensitive to the possibility that regulated electric companies with non-regulated affiliates or divisions may engage in market power abuse, or exact subsidies from ratepayers to fund the activities of a competitive division, by affording their affiliates preferential access to information, tying the purchase of one product or service to the purchase of another, or through other anticompetitive conduct.

To govern interactions between the regulated and competitive divisions or affiliates of electric companies in Massachusetts, the Department proposed a code of conduct in the May 1 Rules. We have received extensive comment on the draft code of conduct during the course of this rulemaking. Over this same time period, the Department opened a parallel rulemaking, D.P.U. 96-44, to establish standards of conduct to govern the relationship between local gas distribution companies and their marketing affiliates. We soon recognized the necessity of applying consistent rules to both electric and gas distribution companies, in light of the convergence of marketing activities between the two industries. Accordingly, on November 27, 1996, we issued a revised draft code of conduct in D.P.U. 96-44, in which we incorporated

changes based on comments received from parties both in D.P.U. 96-44 and in this docket. An Order and final rules in docket D.P.U. 96-44 were issued on December 30, 1996.

We have formulated several new rules to reflect the fact that companies may continue to include generation and distribution divisions within a single corporate entity, rather than forming separate affiliates to perform these functions. Focusing on rules that directly affect distribution companies, the Department eliminated a draft rule from the May 1 Rules that would have required an affiliate offering power to a distribution company to make the power available to the market on the same conditions. We also added a rule stating that the books of account maintained by distribution companies and their affiliates detailing transactions that could affect the ratepayers of the distribution companies would be subject to Department review, in accordance with the provisions of G.L. c. 164, §§ 76A, 85, 85A, and 94B. The new rules also prohibit regulated distribution companies from using their resources, which are ratepayer supported, to market or promote any product or service offered by a competitive division within the company or by an affiliate. In addition, we included in the rules a general prohibition against any action by a distribution company that might harm ratepayers through violation of the rules, and a complaint procedure to bring such action to the attention of the Department. We intend to refer to the antitrust division of the Attorney General's office those forms of anticompetitive behavior that violate the antitrust laws, such as unlawful restraints of trade, undue price discrimination, price fixing, and monopolization.

One question that arises is whether the Department has the authority under the existing statutory regime to order electric companies to adopt different corporate structures or whether an additional grant of authority is required from the Legislature. The first form of corporate

structure discussed above was the complete divestiture of generation assets. In D.P.U. 95-30, at 41 n.31, we noted that, while we have the statutory authority to approve the voluntary sale of assets from one electric company to another if we find the sale is in the public interest (see G.L. c. 164, § 96), there is no explicit statutory authority by which we may order divestiture, nor is it likely to be implied. Further, the Department's lack of authority to order divestiture of generation assets is clear in the case of multi-state holding companies organized under the federal Public Utility Holding Company Act ("PUHCA"). At present, five of the eight investor-owned electric companies in Massachusetts are wholly-owned subsidiaries of multi-state public utility holding companies.⁵¹ Any wholesale sales of generation from generation affiliates to retail distribution affiliates is subject to FERC regulation, and the parent companies are subject to the plenary and exclusive jurisdiction of the Securities and Exchange Commission ("SEC") (Federal Power Act, 16 U.S.C. § 824G et seq.; 15 U.S.C.A. c. 2c, § 79k).

An alternative form of corporate structure is the creation of separate subsidiaries for generation, transmission, marketing, and distribution within one holding company. Once again, the Department lacks the authority to order those electric companies that are subject to SEC jurisdiction to create separate corporations. For those companies that are not multi-state holding

⁵¹ The five are Eastern Edison Company, a subsidiary of Eastern Utilities Associates; Fitchburg Gas and Electric Light Company, a subsidiary of UNITIL Corporation; Massachusetts Electric Company and Nantucket Electric Company, subsidiaries of New England Electric System; and Western Massachusetts Electric Company, a subsidiary of Northeast Utilities.

companies, the broad grant of authority conferred to the Department under G.L. c. 164 may be sufficient to require the creation of separate corporations.⁵²

A third form of corporate structure is the functional separation of generation, transmission, and distribution within one integrated company, with the establishment of a separate marketing affiliate if a company retains generation assets and plans to sell the generation in the competitive market place. In D.P.U. 95-30, at 39-43, we delineated our authority under existing law to order the unbundling of rates. A logical next step after unbundling of rates is the functional separation of generation, transmission, and distribution within one integrated company. The Department's purpose in requiring functional separation is to prevent the subsidization of the competitive function, generation, by the monopoly functions of transmission and distribution. Therefore, one of the reasons that the Department is requiring functional separation is to maintain the integrity of distribution rates. As stated in D.P.U. 95-30, at 40-43, statutes and case law grant the Department wide discretion over the setting and design of rates. Because functional separation is a limited response to an issue critical to the ratemaking function, the Department believes that the power to order such separation is within our existing authority.

It is unclear whether the Department has the authority to order the creation of a separate marketing affiliate if a company retains generation assets and plans to sell the generation exclusively off-system in the competitive marketplace. However, it is clear that the Department has this authority if the company wishes to sell generation to its own distribution customers.

⁵² Boston Edison Company is organized under the laws of the Commonwealth of Massachusetts. Cambridge Electric Light Company and Commonwealth Electric Company are subsidiaries of Commonwealth Energy System, which is an exempt public utility holding company under Section 3(a)(1) of PUHCA.

The Department may condition the purchase of generation by the distribution company, over which the Department has clear jurisdiction, on the existence of a separate marketing company. In addition, to the extent a company may wish to sell generation to customers of other distribution companies, the Department believes that instituting a separate entity to market power would guard against the risk of cross-subsidization by ratepayers of a competitive activity.

We therefore conclude that the minimum structural reorganization consistent with our competitive goals is the functional separation of generation, transmission, and distribution within one integrated company, and the establishment of a separate marketing affiliate if a company retains generation assets. To clarify the authority of the Department to order this result, we are seeking explicit authorization through the proposed legislation that we are submitting to the Legislature. See Appendix B, SECTION 10 (Section 1C. Implementation). The Department is also seeking explicit authorization from the Legislature to impose monetary penalties on any distribution company that violates the corporate rules of conduct established to govern interactions between the regulated and competitive divisions of the company. Id.

C. Horizontal Market Power

1. Introduction

The Department stated in D.P.U. 95-30 that "horizontal market power in the electric industry could arise from undue concentration in the ownership of facilities at the same level in the chain of production [e.g., in generation]. Such concentration could enable one or a few market participants to influence prices to their own benefit." Id. at 20 n. 16. Thus we adopted a principle of ensuring full and fair competition in the generation market. Id. Specifically, the Department stated that "there must be a sufficient number of buyers and sellers to ensure

competitive behavior." Id. In the May 1 Statement at 30-31, we sought comments related to the identification of horizontal market power and mechanisms within our jurisdiction to prevent abuse of such power.

2. Issues Raised

Several commenters contended that there is not sufficient concentration in generation ownership in New England for horizontal market power to be a source of concern (Attorney General April 18, 1996 Comments at 4; MECo August 2, 1996 Comments at 19-20). The Attorney General also stated that a truly independent system operator, and transmission pricing within New England that does not include locational prices, are the best means of addressing geographic market power that might arise in the generation market due to transmission constraints (Attorney General August 2, 1996 Comments at 7).

Other commenters stated that market power could be a problem within the retail market, within service territories, or within particular market segments, and recommended that steps be taken to curb its potential development (EECo August 2, 1996 Comments at 5; DOER August 2, 1996 Comments at 30; WEPCo August 2, 1996 Comments at 6, 11-13; Tr. 3, at 43-55, 218-219). Part of the problem, according to EECo, is that market power is unproven but plausible; until rules are in place that specify the structure of the market, it is difficult to anticipate what kinds of market power abuse might prevail (Tr. 3, at 144-146). WEPCo stated that "the dominant utilities in the region ... control a very high percentage of the low cost generation in New England" and will thus have an advantage in entering the retail market (WEPCo August 2, 1996 Comments at 3). For this reason, and in light of the electric companies' ability to derive advantage from their historic monopoly status, WEPCo stated that "the Department must create a mechanism

that will enable it to promptly remedy any anticompetitive practices that the incumbent utilities may adopt" (id. at 6).

Proposals for addressing market power were varied. EEC_o stated that ISO procedures will be "extremely critical to preventing and reacting to market power abuses," and recommended that the Department and other New England public utility commissions review and critique ISO plans (EEC_o August 2, 1996 Comments at 5). DOER recommended that a distribution company be required "to provide an annual report which describes the number of suppliers and the percentage of customers served by those suppliers in its service territory" (DOER August 2, 1996 Comments at 30). WEPC_o suggested that antitrust laws would not be sufficient to stem anticompetitive practices (WEPC_o August 2, 1996 Comments at 31-32). WEPC_o also stated that it is critical that there be "at least 5-10 companies, dealing with one another at arm's length, competing at both the retail and wholesale supplier levels" (id. at 2, 6). WEPC_o suggested specific rules to promote competition in generation and urged the Department to ensure effective competition by taking preventive actions such as placing restrictions on the use of stranded cost proceeds (id. at 20, 32-34). WEPC_o also suggested that there be an administrative procedure established for resolution of claims regarding abuse of market power (id. at 34).

Some comments focused on market power in a given market segment (e.g., residential, commercial, or industrial) that could leave groups of customers with few choices and potentially high prices, and that could restrict the number of competitors. CPC stated that a robust market requires qualified competitors to have access to all customers rather than just a small portion of customers who do not take basic service from their distribution company, and that basic service should be supplied through a bidding process that allows qualified competitors access to the full

market (CPC August 2, 1996 Comments at 17-18). According to CPC, if only a small percentage of consumers chose to leave basic service and competitors could have access to only that small pool of customers, alternative suppliers would not emerge (CPC August 2, 1996 Comments at 17).

3. Current Department Proposal

The detection of excessive horizontal market power and remedies for its abuse are elusive, because the market within which such abuse could occur has not yet been completely defined and is not yet in full operation. In presenting our vision of a restructured industry, we have proposed a number of steps to ensure a robust generation market, such as the creation of an ISO, policies that minimize the ability of electric companies to capitalize unfairly on their incumbent role, and the application to electric companies of rigorous corporate rules of conduct. However, as the electric services market evolves in Massachusetts, we will assess the degree to which competition exists and will take such actions as necessary to ensure that the full benefits of competition are achieved.

Throughout the process of this rulemaking, we have actively participated in defining an ISO that will ensure robust competition in New England. In Section IV of this document, we outline a proposal for transmission pricing policies that provide appropriate price signals to the market while constraining market power. In addition, we plan to evaluate carefully any proposed mergers within our jurisdiction in light of the potential for market concentration on a regional basis and potential abuses of horizontal market power.⁵³

⁵³ Notwithstanding our concern that some mergers may lead to excessive market concentration, we remain convinced that other possible mergers involving smaller

DOER's proposal to require an annual report from each distribution company detailing the number of suppliers in its service territory and the percentage of customers served by each appears unnecessarily burdensome and would require aggregation of all data submitted by distribution companies in order to determine whether horizontal market power abuse were a concern. Instead, we shall require, through the standards of conduct for distribution companies and their affiliates, that distribution companies establish a dispute resolution procedure to address complaints alleging violations of the standards of conduct. Distribution companies will also be required to maintain a log for Department review of all new, pending, and resolved complaints.

WEPCo and CPC raise concerns about whether there will be sufficient competition within a service territory. The Department's proposed policies in the section on generation supplier requirements, in particular our approach to the pricing and form of regulation of standard offer service, should mitigate potential anticompetitive behavior by ensuring that distribution companies have a strong financial motivation when providing standard offer service to seek out the least expensive generation, whether it is from an affiliated generating company or not.

The Department believes that, with the implementation of the types of safeguards discussed herein, and with the light-handed but attentive oversight of our agency and other

companies may assist meaningfully in bringing down costs. We reaffirm our policy, articulated in Mergers and Acquisitions, D.P.U. 93-167, at 5, that we expect utilities to explore thoroughly all cost-saving measures and opportunities to achieve efficiencies, including mergers and acquisitions, and we encourage all companies to consider combinations that are consistent with our long-term goals of fostering effective competition and driving down rates.

supervisory authorities during the early stages of the transition, restructuring activities in New England will foster increasingly robust competition among many suppliers at both the retail and the wholesale level. All of the structural mechanisms outlined in this section have been developed with the express intention that, over time, as competitive pressures within the industry intensify, the Department will be able to withdraw some of the more extensive forms of oversight that will be necessary in the early stages. However, in the event that restructuring does not appear to offer consumers benefits due to insufficient competition, the Department will take further steps within its jurisdiction and in coordination with other entities to achieve the expected benefits and, if necessary, seek further state or federal legislation.

SECTION VI -- DISTRIBUTION SERVICES

Distribution service involves the connection of the electricity consumer to the electric system. It is the component of electric service that takes place on the customer side of distribution substations. Historically, distribution service has been provided by investor-owned and municipal utilities within clearly defined service territories. The goal of ensuring a smooth transition to a restructured electric industry, one which is orderly and expeditious, and minimizes customer confusion, will be furthered by an approach that minimizes changes to distribution service, instituting for the immediate future only those changes necessary to achieve transition to retail access. Thus, the Department proposes that the distribution of electricity remain a monopoly service offered exclusively by the local distribution companies in clearly defined service territories through the transition. The Department will defer any refinements in the scope of the monopoly distribution function to a later date.

From the standpoint of the customer, distribution service will remain substantially the same. Distribution companies will continue to have the obligation to connect all customers in their service territories to their distribution systems. These companies will be responsible for operating their distribution systems in a manner that maintains the current level of reliability. In addition, they will provide the same billing, metering, and other customer service functions that currently are provided by the vertically integrated electric companies, with the exception that customers who purchase generation from competitive suppliers will have the option to receive a separate bill for generation from their suppliers. The Department will comprehensively regulate distribution companies, including the rates that consumers are charged for distribution service. Distribution companies will be required to design low-income customer tariffs that will provide the same level of discounts for low-income customers that are currently provided. Finally, the billing and termination regulations that currently apply to the vertically integrated electric companies will continue to apply to distribution companies.

Following restructuring, the regulation of local distribution service to ensure universal access to reliable service at the lowest possible cost will be at the core of the Department's regulatory mission. The Department expects to rely on performance-based regulation when establishing distribution company rates. The Model Rules developed by the Department pertaining to distribution company functions are found in 220 C.M.R. § 11.04.

SECTION VI -- DISTRIBUTION SERVICE

A. Introduction

Within the current electric industry structure, the Department comprehensively regulates the eight investor-owned, vertically integrated electric companies that provide generation, transmission, and distribution services as a bundled package to electricity consumers located in their service territories in Massachusetts.⁵⁴ In the restructured industry, the provision of these services will be unbundled. Distribution service will be provided by companies that may be corporate divisions or subsidiaries of companies that continue to be vertically integrated or, alternatively, may be stand-alone, non-integrated companies (i.e., companies with no affiliation with owners of generation or transmission assets). These distribution companies will continue to be comprehensively regulated by the Department.

Distribution companies will play a vital role in the restructured electric industry. Their primary function will be to provide distribution service. Distribution companies will be responsible for operating the distribution systems through which all electricity will be delivered to consumers, regardless of whether the electricity was purchased through the competitive generation market or not. In addition, these companies will provide the billing, metering, and other customer service functions currently provided by the integrated electric companies. Distribution companies also will be required to work closely with competitive suppliers of generation in the billing of consumers who are purchasing generation from these suppliers.

⁵⁴ The Department regulates the 40 municipal electric companies in Massachusetts but in a much less comprehensive manner than it regulates the investor-owned electric companies.

The Department's Model Rules call for distribution companies to provide other services that are not directly tied to distribution service, as required by the principles for restructuring established in D.P.U. 95-30. First, distribution companies will be responsible for making generation available to those customers who, for whatever reason, are not receiving such service from a competitive supplier. Second, distribution companies will be required to design low-income customer tariffs that will provide the same level of discounts for low-income customers that are currently provided. Third, distribution companies will continue to provide energy efficiency services to their customers. Finally, they will be responsible for collecting monies for a renewable energy resource fund.

This section begins with a discussion of whether the distribution franchise service territories are exclusive. The Department then focuses on more specific issues: (1) the provision of distribution service, (2) the terms and conditions that will govern the relationship between distribution companies and competitive suppliers, (3) low-income customer tariffs, and (4) performance-based regulation for distribution companies. Two other sections address aspects of distribution company responsibilities. In Section VII, the Department addresses the generation responsibilities of distribution companies. Finally, in Section IX, the Department addresses the responsibilities that distribution companies will have regarding the procurement of alternative energy resources.

B. Distribution Franchise

1. Introduction

The distribution company is the vital link between the competitive generation sector, the transmission grid, and each and every retail customer. The Department received many comments regarding whether the service territory of that distribution company and the functions it performs should remain under exclusive control of the incumbent electric companies.

In D.P.U. 95-30, at 4-8, the Department reviewed the history and current structure of the regulated monopoly electric industry. With respect to the distribution function, each electric company distributes electricity within clearly defined service territories. Id. at 5. The distribution of electricity will remain a monopoly service, and will thus continue to require regulatory oversight. Id. at 28. In the May 1 Statement at 39, citing D.P.U. 95-30, at B.9, again the Department noted that historically the distribution of electricity has been provided by investor-owned utilities on a monopoly basis within clearly defined service territories, but stated that whether the electric companies' franchises in those service territories are exclusive is unclear as a matter of law. However, we concluded that our goal of ensuring a smooth transition would be furthered by building on the base of existing, clearly defined service territories served by restructured distribution companies, and therefore, as a matter of general policy, proposed to hold existing distribution service territories intact and consider them exclusive through the transition. Id. at 40.

Furthermore, we proposed that the retail distribution of electricity remain a monopoly service offered exclusively by local distribution companies. Id. After distribution rates become unbundled, it is possible that other functions at the distribution level such as billing and metering

will be offered by competitive markets. Id. Finally, our policy of treating service territories as exclusive would preclude customers situated at distribution companies' territorial borders from seeking service from neighboring distribution companies, unless consistent with Department precedent or mutually supported by both distribution companies for reasons of cost or convenience. Id. at 40 n.28.

This section will discuss the arguments for and against the exclusive distribution franchise, the length of time the franchise should remain exclusive, and the Department's authority to establish or amend the distribution franchise. Next, the section explores whether certain functions of the distribution company should be subject to competition or provided by entities other than the distribution company, which functions should remain under the exclusive control of the distribution company, and when and how the Department should make this determination. Finally, the section discusses issues relating to customer bypass of the distribution service territory.

2. Issues Raised

Several commenters, especially the local electric companies, asserted that the distribution franchise is exclusive. They recommended that the Department specifically state that distribution companies shall retain exclusive franchises, that the exclusivity should be reaffirmed explicitly by statute, and that there should not be uncertainty around the franchise of distribution companies (BEC Co August 2, 1996 Comments at Briefing Question DF-1; COM/Electric August 2, 1996 Comments at ii, Briefing Question DF-1; Tr. 9, at 167-168). Some electric companies claimed that current franchises involve important property rights and that electric companies' exclusive franchises cannot be extinguished without due regard for those property rights (EECo August 2,

1996 Comments at 18; FG&E August 2, 1996 Comments at 44-45; WMECo May 24, 1996 Comments at 23). Other electric companies asserted that existing service territories should be treated as exclusive to allow stranded cost recovery (MECo August 2, 1996 Comments at 12; Tr. 9, at 148-150). In addition, several electric companies insisted that changing existing franchise rights will require substantial legislative changes (see WMECo May 24, 1996 Comments at 20; FG&E May 24, 1996 Comments at 16; see also COM/Electric August 2, 1996 Comments at 8; Tr. 9, at 177).

On the other hand, the Attorney General and DOER asserted that electric companies clearly do not possess exclusive franchises in their service territories, and according to the Attorney General, the Department lacks the authority to create exclusive franchise service territories absent legislative action (Attorney General May 24, 1996 Comments at 19-20; DOER August 2, 1996 Comments at 37-38; see also AIM August 2, 1996 Comments at 28). In addition, the Attorney General argued that the Department is obligated to change service territories and even grant competing franchises if required by the public interest, but that there is no public interest in assuring exclusivity (id.; Tr. 9, at 152). DOER maintained that the Department has the discretion to allow competition in the distribution function, and therefore no aspect of distribution service should be provided on an exclusive basis in the future (DOER August 2, 1996 Comments at 37-38). The Barnstable County Commissioners submitted that making distribution franchises exclusive as a matter of law or practice is contrary to the establishment of a competitive industry, and that one alternative to exclusive distribution franchises is to make distribution service a matter of contractual agreement with local governments (Barnstable County Commissioners August 2, 1996 Comments at 16).

Several commenters proposed to link the length of time a franchise might remain exclusive to the period over which electric companies recover stranded costs. Some commenters stated that distribution companies must maintain an exclusive franchise right to provide distribution service until stranded cost recovery is complete, while another suggested that franchise protections for distribution companies may not be necessary once stranded cost recovery has been completed (see Tr. 9, at 140-141, 148-149; COM/Electric August 2, 1996 Comments at Briefing Question DF-2; AIM May 24, 1996 Comments at 19). MECo contended that a sunset of franchise exclusivity at the end of the ten-year transition period proposed in our May 1 Statement would affect distribution company rates now, as distribution companies accelerate the amortization of their remaining distribution investment to be completed by the end of the transition, and may create distribution company stranded costs (Tr. 9, at 178-179; see also BECo August 2, 1996 Comments at Briefing Question DF-2).

Commenters submitted recommendations on whether functions performed by the distribution company should be provided competitively or exclusively by the distribution company. Some commenters argued that certain distribution company functions should be provided competitively, including billing, metering, energy efficiency, distributed generation, customer service, and information services (see May 24, 1996 Comments of: The E Cubed Company at 9, 12-14; Eastern Power at 14-15;⁵⁵ APS at 7-8; AIM at 19; Freedom Energy at 28-

⁵⁵ Eastern Power also maintained that ancillary services or support services peculiar to distribution, such as standby or backup service, should be unbundled and identified (Eastern Power May 24, 1996 Comments at 6-7, 14-15).

30; DOER at 35).⁵⁶ The E Cubed Company maintained that new providers will emerge to provide these functions as competitive services (Tr. 9, at 198). Some commenters stated that the distribution company should become a "wires only" service provider (Freedom Energy May 24, 1996 Comments at 29).⁵⁷

Other commenters, especially the electric companies, argued that distribution functions should be provided exclusively by distribution companies, stating that the future distribution company must have the exclusive right and responsibility to provide all aspects of distribution service that proceed from the obligation to connect customers and deliver power to them (COM/Electric August 2, 1996 Comments at Briefing Question DF-1; EEC0 August 2, 1996 Comments at 11).⁵⁸ Some commenters insisted that the exclusivity of some or all aspects of the distribution function should be maintained upon the introduction of consumer choice, in order to facilitate the achievement of Department objectives in restructuring (MECo August 2, 1996 Comments at 12; Tr. 9, at 149-150; WMECo August 2, 1996 Comments at 50).⁵⁹

⁵⁶ DOER argued that distribution companies should continue to be responsible for metering, meter reading, billing and settlement (DOER May 24, 1996 Comments at 35).

⁵⁷ Freedom Energy noted that the Department should begin to structure a transition in utility accounting practices, including a separation and delineation of wires accounts from all other distribution functions accounts (Freedom Energy May 24, 1996 Comments at 30-31).

⁵⁸ COM/Electric argued that this includes virtually all the same distribution services now provided under the current regulatory structure (COM/Electric August 2, 1996 Comments at Briefing Question DF-1).

⁵⁹ WMECo stated billing, metering, distribution system ownership and maintenance should remain functions exclusively provided by the distribution franchise, but that these functions may be provided through utilization of outside parties (WMECo August 2, 1996 Comments at 50).

Some commenters provided criteria to distinguish those functions of the distribution company that should remain in the exclusive control of the distribution company from others that could be provided competitively. BECo defined those services that should be provided on an exclusive basis by a distribution company as (1) those services which affect the design and operation of physical distribution plant; (2) those services related to the reliability⁶⁰ of the distribution system; and (3) anything related to public safety of the distribution system (BECo August 2, 1996 Comments at Briefing Question DF-1). Fitchburg proposed that certain elements should remain in the exclusive control of the distribution company in order to (1) avoid duplication of facilities, and (2) continue to provide the required level of service and reliability (FG&E August 2, 1996 Comments at Briefing Question DF-1).⁶¹ Cellnet offered the following criteria to determine which distribution services should remain as part of the monopoly franchise: (1) whether the service is an integral part of the wires business; (2) whether the service is characterized as a natural monopoly; and (3) whether the service is characterized by safety and security issues that require distribution company control (Cellnet August 2, 1996 Comments at 2-3). Alternate Power Source stated that only those distribution services that are essential to the

⁶⁰ National Consumer Law Center also emphasized reliability as an important factor when introducing competition to the distribution network (NCLC August 2, 1996 Comments at 7-8). It argued that billing and collection should remain a monopoly function, and that metering should be provided under Department supervision (*id.*).

⁶¹ Fitchburg maintained that meter reading, customer billing and payment, outage notification and restoration, and customer service need not be provided exclusively through the local distribution company, if the marketplace evolves such that competitive suppliers develop for these services (FG&E August 2, 1996 Comments at Briefing Question DF-1).

welfare of the community and its energy supply should be provided on an exclusive basis by distribution companies (APS August 2, 1996 Comments at Briefing Question DF-1).

During the hearings, the Department received different opinions on when and how the issue of competition for distribution company functions should be addressed. Many commenters agreed that the issue of which, if any, distribution services should be supplied competitively warrants more detailed attention than could be provided given the scope and timeframe of this proceeding, and should be the subject of a separate rulemaking (see Attorney General August 2, 1996 Comments at 11 (Department should institute a rulemaking to examine the future scope of activities to remain within the exclusive province of distribution utilities and final rules should be issued by mid-1997)). Certain commenters argued that the introduction of competition in elements of distribution service should be delayed (see Tr. 9, at 149-150; MECo August 2, 1996 Comments at 12 (Department should focus on introducing a competitive framework for generation, where the potential is greater for customer savings, instead of attempting to introduce competition in generation and distribution services at this time⁶²); EECco August 2, 1996 Comments at 12 (revisit the issue of which elements of the distribution franchise should be subject to competition at or near the end of the transition); BECo August 2, 1996 Comments at Briefing Question DF-2 (movement of various distribution company services to competition should be revisited in five years); WMECo August 2, 1996 Comments at 51 (elements of the

⁶² MECo outlined criteria by which to judge whether a distribution franchise should be subject to competition: (1) competition would reduce costs for customers; (2) the introduction of competition is administratively feasible; (3) competition would not increase the frequency or duration of interruptions in the supply of electricity to customers; and (4) competition would not degrade power quality to customers (MECo August 2, 1996 Comments at Briefing Question DF-2).

distribution company function should not be opened to competition until we have experience from the retail generation market)). Other commenters contended that competition in some aspects of distribution service should be introduced shortly, or after a brief observation period (see Attorney General August 2, 1996 Comments at 11; Tr. 9, at 166; APS August 2, 1996 Comments at Briefing Question DF-2 (the Department should issue regulations which allow other entities to provide billing, meter reading, conservation, and other non-emergency services as of January 1, 1998); CLF May 24, 1996 Comments at 11 (recommending a two-year period to observe and evaluate the behavior of disaggregated distribution companies); The E Cubed Company May 24, 1996 Comments at 9; APS August 2, 1996 Comments at Briefing Question DF-2).

Several commenters expressed concern that some customers may attempt to bypass the distribution system to connect to neighboring distribution companies as a means to avoid stranded costs or transition payments, that allowing bypass would be bad public policy, and that it should not be allowed (see WMECo August 2, 1996 Comments at 51; MECo August 2, 1996 Comments at 12; Tr. 9, at 171, 194). However, the Attorney General argued that the Department should determine whether to allow bypass on a case-by-case basis,⁶³ and apply a broad public interest test to assess this form of bypass; and contended that at times it may be in the public interest to allow a customer to connect to another distribution company rather than allowing that customer to close its business or leave the state (Tr. 9, at 155, 170). Other

⁶³ The Attorney General listed six factors for determination of the public interest for bypass: adequacy of existing service in the particular area served; issues of plant duplication; economic impacts on customers; utility investment to serve customers; comparative costs to serve; and customer preference (Tr. 9, at 155).

commenters urged that the Department not limit or foreclose border competition, because of the positive effects of increased competition and customer choice (see FG&E May 24, 1996 Comments at 14⁶⁴; WMECICG May 24, 1996 Comments at 22; Eastern Power May 24, 1996 Comments at 15; TEC August 2, 1996 Comments at 9-10⁶⁵).

3. Current Department Proposal

One of the Department's principles to guide restructuring is to ensure that the transition is orderly and expeditious, and minimizes customer confusion. D.P.U. 95-30, at 30. The focus of restructuring at this time is on fostering competitive conditions in the generation sector, and it is the Department's view that leaving distribution service territories intact, at least during the initial stages of restructuring, will avoid customer confusion. This approach will allow consumers to adjust to changes in the generation market before being confronted with any changes in the distribution function. In addition, many issues related to competition in distribution service territories, such as consumer protection and maintenance of safety standards, require a more rigorous investigation than can be effectively accomplished during this phase of restructuring. Furthermore, distribution service will continue to exhibit characteristics of a natural monopoly, and will continue to be regulated by the Department. Finally, monopoly distribution companies provide a vehicle through which stranded costs and public policy costs may be assessed and

⁶⁴ Fitchburg argued, in relation to franchise borders, that the Department should not create franchise rights greater than those that currently exist (FG&E May 24, 1996 Comments at 14).

⁶⁵ The Energy Consortium maintained that large user facilities should be able to distribute electric output of total thermal energy systems to other local users without the burden of an access fee (TEC May 24, 1996 Comments at 3; TEC August 2, 1996 Comments at 10). The Department understands these systems to be cogeneration systems.

collected from all consumers, at least during the transition to a fully competitive generation market, since all consumers are customers of a distribution company. Therefore, it is consistent with our goal of an orderly transition to address changes to distribution service territories at a later date.

While the Department notes the divergent views on the existence and desirability of exclusive franchises,⁶⁶ we reaffirm our view that maintaining the current monopoly franchise service territories for distribution is in the public interest at least during the transition to competitive markets. Whatever distribution franchise currently exists in each service territory, including the rights and responsibilities which define those franchises, will be maintained for as long as is necessary to accomplish our goal of an orderly transition to competitive markets.

The rationale for maintaining the current distribution service territories, however, may change over time. We are implementing retail competition to harvest the benefits of competition in the generation sector, and in doing so, are imposing costs on the distribution system. One of the reasons for continuing the existing monopoly over distribution services is to assure the opportunity to recover transition costs due to this regulatory change. However, the Department will not indemnify any utility against the full range of possible changes that could affect its business prospects. The market and technologies affecting distribution companies are subject to evolution; Department regulation cannot guarantee the viability of the distribution business in the future in the face of these changes. See Market Street Railway Company v. Railroad Commission of California, 324 U.S. 548, 567 (1945) ("[t]he due process clause has been applied to prevent

⁶⁶ See D.P.U. 95-30, App. B.

governmental destruction of existing economic values. It has not and cannot be applied to insure values or to restore values that have been lost by the operation of economic forces"). As a matter of policy, the Department will treat the distribution service territory as exclusive. We reserve the right to reevaluate whether our treatment of such distribution service territory as exclusive continues to be consistent with the public interest in a competitive industry.

The issue of exclusive franchise rights and obligations, and the Department's authority to alter those rights and obligations, is much debated. Our discussion now turns to the following aspects of this issue: (1) the Legislature is the original source of authority to grant and modify franchises; (2) the Department has no express authority to grant or modify franchises, but authority may be implied from other express authorities including significant Department jurisdiction over the distribution function; (3) the Department has authority over certain actions regarding electric company franchises, including interpreting franchise rights; and (4) the Department has the authority to determine which distribution functions should be supplied competitively.

The Legislature is the original source of authority regarding franchises.⁶⁷ See Boston Elevated R. Co. v. Com., 310 Mass. 528, 550 (1942), citing Boston & Lowell Railroad Corp. v. Salem & Lowell Railroad, 2 Gray [68 Mass.] 1, 32 (1854) ("[t]his location ... was granted by the Legislature in the exercise of its power as 'the representative of the whole people...to control and regulate public property and public rights, to grant lands and franchises, to stipulate for, purchase

⁶⁷ A franchise is a special privilege to do certain things conferred by government on an individual or corporation, and which does not belong to citizens generally of common right. Black's Law Dictionary, 658 (6th ed., 1990).

and obtain all such property, privileges, easements and improvements, as may be necessary or useful to the public, to bind the community by their contracts therefor, and generally to regulate all public rights and interests"): Weld v. Board of Gas and Electric Light Commissioners, 197 Mass. 556 (1908) (a corporation organized to exercise a public franchise ... enjoys public rights in the street, which are derived from the Commonwealth, through action of the board of aldermen under authority of the Legislature). Franchises may be modified by the Legislature. See Mass. Const. art. LIX; see also G.L. c. 155, § 3. Franchises may also be modified by the terms of the corporate charter which defines a franchise. See G.L. c. 164, § 8A. Moreover, a gas or electric corporation must apply to the Legislature for authority to transfer its franchise. G.L. c. 164, § 21 (corporation subject to Chapter 164 shall not, except as otherwise expressly provided, transfer its franchise, lease its works or contract with any person, association or corporation to carry on its works, without the authority of the General Court). The courts have authority to enforce franchises. See e.g., G.L. c. 156B, § 10.

While the Department does not have express authority to establish or amend franchises, authority to amend franchises⁶⁸ might be inferred from the Department's general supervisory powers under G.L. c. 164, § 76, or the comprehensive authority to regulate utilities granted in

⁶⁸ The Court has stated that the Department has continuing power to amend certificates of public convenience and necessity subject to the public interest. Holyoke Street Railway Company v. Department of Public Utilities, 347 Mass. 440, 445 (1964). Furthermore, the public convenience and necessity standard allows the Department to exercise wide discretion to take into account a broad range of factors in making the determination of whether it has been met, and public interest is the overriding meaning of the term "public convenience and necessity." Zachs v. Department of Public Utilities, 406 Mass. 217, 223 (1989). There are similarities between issuing certificates of public convenience and necessity, and making determinations affecting the franchises of electric companies.

G.L. c. 164.⁶⁹ An agency's powers are shaped by its organic statute taken as a whole, and powers granted include those necessarily or reasonably implied.⁷⁰ Grocery Manufacturers of America, Inc. v. Department of Public Health, 379 Mass. 70, 75 (1979), citing Commonwealth v. Cerveney, 373 Mass. 345 (1977), Opinion of the Justices, 368 Mass. 831 (1975). The Department has significant authority over various aspects of electric company functions, including distribution functions. See e.g., setting of rates (G.L. c. 164, § 94); approval of distribution lines with eminent domain authority (G.L. c. 164, §§ 72, 87-91); oversight of corporate matters of gas and electric companies (G.L. c. 164, §§ 3-33); review of acquisitions and mergers (G.L. c. 4, § 96). Specific statutory authority to act in a particular respect does not bar consistent action under

⁶⁹ Compare Charles River Park v. Boston Redevelopment Authority, 28 Mass. App. Ct. 795, 808 (1990) (public grants must be strictly construed against the grantee), citing Prudential Insurance Co. of America v. Boston, 369 Mass. 542, 547 (1976) (nothing will be included in the grant except what is granted expressly or by clear implication); Cleaveland v. Norton, 6 Cush. [60 Mass.] 380, 383-384 (1850) (in all grants, made by the government to individuals, of rights, privileges, and franchises, the words are to be taken most strongly against the grantee).

Of course, the Department is aware that we may not exert authority beyond our statutory powers. Beaser v. Boston Electric Illuminating Co., D.P.U. 836, (1922) ("[t]his Department is a creature of the legislature and its powers are entirely derived from the statutes of this commonwealth; those statutes it ought, undoubtably, to construe in a spirit of liberality and one likely to give effect to the full intention of the legislature, but it ought not, on the other hand, to strain the express powers conferred upon it to the breaking point, even to avoid what may otherwise be an undesirable result"); see also Massachusetts Electric Company v. Department of Public Utilities, 419 Mass. 239 (1994). However, the Department has considerable discretion within its statutory boundaries.

⁷⁰ An agency has considerable leeway in interpreting a statute it is charged with enforcing. Grocery Manufacturers of America, Inc. v. Department of Public Health, 379 Mass. 70, 75 (1979), citing Consolidated Cigar Corp. v. Department of Public Health, 372 Mass. 844, 850 (1977).

general statutory authority. Grocery Manufacturers of America, Inc. v. Department of Public Health, 379 Mass. 70, 76 (1979).

Although the Department has not created franchises,⁷¹ it has statutory authority to take actions that affect the scope of the utility franchise, e.g., authorize a utility to carry on business in any town other than the town named in its agreement of association or charter pursuant to G.L. c. 164, § 30 (Colonial Gas Company, D.P.U. 92-171 (1992)); review a decision of aldermen or selectmen to grant authority to another electric company to serve a town pursuant to G.L. c. 164, § 88 (Halifax Electric Cooperative, Inc. v. Western Massachusetts Electric Company, D.P.U. 9204 (1951)); and authorize extension of mains or lines by a municipal light plant into an adjoining town where the town is not already receiving service from the town or a private corporation pursuant to G.L. c. 164, § 47 (City of Holyoke Gas and Electric Department, D.P.U. 86-80 (1986)). The Department has also interpreted franchises. Riverdale Mills Corporation, D.P.U. 86-209 (1990). In addition, the Department has set limits on a company's franchise area

⁷¹ Electric company franchise rights have been established in the following manners: (1) special acts of the Legislature, which occasionally require concurrence of town selectmen or the Board of Gas and Electric Light Commissioners; (2) grant of street locations by town governments or by the Department on appeal; (3) through description in a corporate charter; and (4) authorization by the Department to carry on business in a town other than the town named in its agreement of association or charter (evidence of support by the community affected generally required). See Manufactured Gas Waste Generic Investigation, D.P.U. 89-161 (1990), Exhibit DPU-15-A (Flow Chart Depicting History of Gas and Electric Utilities in Commonwealth of Massachusetts); see also Tri County Electric Company, D.P.U. 5352/5353/5354 (1937) (description of manner in which new customers may come on the line of any electric company). Where a corporate charter gives a corporation authority to sell electricity, the corporation must also secure permission from local officials to use the public ways to lay and maintain distribution wires. See Attorney General v. Haverhill Gas Light Company, 215 Mass. 394 (1913) (a public service corporation has an appropriate franchise from the State and is dependent for its exercise upon eminent domain or some other agency of government).

(Pequot Water Company, Inc., D.P.U. 18544 (1977); Assabet Water Company, D.P.U. 17524 (1973)), restricted competitive resale of electricity in an area, (Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 477 (1956)), and decided which company may serve particular customers when there is a dispute in a geographic area (Burlington Gas Company, et al., D.P.U. 12336/12495/12573 (1958)). The Department has denied approval of the issuance of stock and mortgage notes that were required to begin doing business as an electric company in Massachusetts. Tri County Electric Company, D.P.U. 5352/5353/5354 (1937).

Furthermore, the Department's authority over rates, and terms and conditions of service can affect what services are offered by an electric company, how those services are offered, and the price charged for those services. See G.L. c. 164, § 94; Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 477, 485 (1956) (Department has "jurisdiction not only over the stated rates, prices and charges for various classifications of service, and the relationship between classifications, but also over reasonably related terms and conditions"). The authority to prescribe which services may be subject to competition is closely related, and flows naturally from actions already within the purview of the Department. Although the power to create or amend franchise service territories may be reserved to the Legislature, we conclude that the Department has the authority to determine which distribution functions should be provided competitively in the future. However, we note that this conclusion is not based on any one statutory provision or court case, but from a comprehensive reading of authority granted to the Department by the Legislature.

Many commenters urged the Department to allow competition in certain distribution company functions, such as billing, metering, and energy efficiency services, even if the

distribution service territory were to remain under the exclusive control of the incumbent electric companies. The Department agrees that this subject requires further attention. In addition to the discussion surrounding the Department's authority to change existing distribution company functions, issues such as the Department's and distribution companies' continued roles, respectively, in the regulation and provision of newly-competitive services must be decided. This proceeding, which is focused on establishing conditions for competition in generation, is not the proper forum to address the various issues surrounding competitive procurement of distribution company functions. Therefore, the Department will defer its consideration of potentially competitive aspects of the distribution company function at this time. After January 1, 1998, or after distribution company performance-based ratemaking ("PBR") is in place, we will entertain proposals for allowing the orderly development of competition for certain distribution functions.

The Department notes that its proposal to maintain the current utility service territories does not foreclose a distribution company from electing to contract with another entity to perform certain of its functions.⁷² Under the current and proposed regulatory frameworks, each company providing distribution services will continue to have the obligation to provide such services at least cost. Commonwealth Electric Company, D.P.U. 89-114/90-331/91-80, at 193 (1991) (the company is obligated to serve the public interest by providing reliable, safe service at the least possible cost); D.P.U. 95-30, at 6 (Department to ensure regulated public utility companies provide safe, reliable, and least-cost service to Massachusetts consumers); Incentive Regulation, D.P.U. 94-158, at 42 (1995) (Department responsible for ensuring the propriety of

⁷² This process is sometimes referred to as outsourcing.

proposed rates, which the Department has interpreted to mean rates which are just and reasonable). In order to continue to meet their obligation to provide least-cost service, distribution companies should pursue competitive procurement of distribution services if it is the least-cost alternative for a particular function. The Department's plan to require PBR for distribution will also provide incentives for a distribution company to choose least-cost options to provide service, consistent with the distribution company's other obligations.

Consistent with our proposal to maintain current distribution service territories, the Department will continue to view distribution bypass as an exception to the rule, and allow bypass only for the reasons stated in our May 1 Statement (e.g., where consistent with Department precedent or mutually agreed upon by both distribution companies for reasons of cost or convenience). D.P.U. 96-100, at 40 n.28. The Department notes that a proponent of a bypass request bears a heavy burden to prove why such a request should be granted.⁷³

C. Distribution Service

Distribution service is the component of electric service that takes place on the customer side of distribution substations. It is composed of two elements: (1) a physical component, consisting of the equipment (i.e., the substations, poles, wires, and transformers that are readily observable along roadways) involved in receiving high voltage electricity from the bulk power

⁷³ For Department precedent on border competition, see Ecological Fibers, Inc., D.P.U. 85-71 (1985) (in absence of evidence demonstrating that Fitchburg Gas and Electric Light Company had an exclusive right to provide utility service in Lunenburg, the Department determined that the public interest did not require Fitchburg to serve this customer, and therefore allowed a neighboring electric company to provide electric service); Foley, D.P.U. 86-45/86-144 (1987) (where both BECo and the Wellesley Board of Public Works were authorized to serve this customer, the Board's refusal to serve this customer was unreasonable and discriminatory).

system and delivering the electricity, at reduced voltages, to consumers; and (2) a customer service component, consisting of metering, billing, addressing customer inquiries and complaints, and other services.

Electricity consumers should see no change in the quality and reliability of the distribution service they receive after restructuring. Distribution companies will continue to have the obligation to connect all customers in their service territories to their distribution systems. See D.P.U. 95-30, at 16; May 1 Statement at 45. These companies will be responsible for operating their distribution systems in a manner that maintains the current level of reliability.⁷⁴ In addition, they will provide the same billing, metering, and other customer service functions that currently are provided by the vertically integrated electric companies, with the exception that customers who purchase generation from competitive suppliers will have the option to receive a separate bill for generation from their suppliers. The Department will comprehensively regulate distribution companies, including the rates that consumers are charged for distribution service. Finally, the billing and termination regulations that currently apply to the vertically integrated electric companies will continue to apply to distribution companies.⁷⁵

Distribution companies will be required to submit, for Department review, the terms and conditions that will govern the provision of distribution services. These terms and conditions, which should be similar to the terms and conditions currently on file at and approved by the

⁷⁴ This is analogous to the bulk power system operator's responsibility for ensuring the reliability of the bulk power system.

⁷⁵ The Department's billing and termination regulations are included in 220 C.M.R. §§ 25 et seq. These regulations are discussed more fully in Section VII.

Department, primarily should address issues associated with the distribution company's physical assets (e.g., line extension policies, protection of the company's assets), payments of bills, and metering. However, the terms and conditions will need to include certain provisions that will be unique to the restructured electric industry. For example, distribution companies will play a key role in informing consumers about competitive suppliers registered in Massachusetts. The terms and conditions should describe the means by which this information will be disseminated to consumers. In addition, the terms and conditions should inform customers that distribution companies may not provide customers' billing information to competitive suppliers unless the customer has so authorized.

Finally, consistent with the principle that customers should be offered the broadest possible choices in generation, distribution companies must provide comparable distribution service to all consumers of electricity, in a non-discriminatory manner, regardless of the source of generation for a particular consumer.⁷⁶

D. Terms and Conditions for Competitive Suppliers

As discussed in Sections II and VII, the most significant change that electricity consumers will see from the restructuring of the electric industry is that they will have the opportunity to purchase generation from entities other than the electric company in whose service territory they are located (as discussed in Section VII, these suppliers of generation are referred to as "competitive suppliers"). Distribution companies will be required to submit, for Department

⁷⁶ This is similar in concept to FERC Order 888 regarding transmission service comparability.

approval, the terms and conditions that will govern the relationship between the companies and competitive suppliers. This section addresses these terms and conditions.

The primary interaction between distribution companies and competitive suppliers will involve the exchange of information needed to bill consumers for generation. A consumer purchasing generation from a competitive supplier will have the option of receiving a separate bill for generation from the supplier or, alternatively, being billed for generation by the distribution company on behalf of the competitive supplier, thus receiving a single electric bill. In order for competitive suppliers to issue separate bills for generation, distribution companies will need to provide information to the suppliers regarding each consumer's metered consumption.

Alternatively, for distribution companies to bill for generation on behalf of competitive suppliers, suppliers will need to provide information to distribution companies regarding the price of the generation. In addition, distribution companies will need to specify the manner by which generation revenue will be transferred from the companies to competitive suppliers. The terms and conditions must include provisions that would accommodate both types of billing arrangements.

As discussed in Section VII, below, the Department considers it essential that consumer protections against potential competitive supplier misconduct be explicitly provided through regulation, at least during the initial transition to a competitive generation market. The Department has proposed a range of sanctions that may be imposed on competitive suppliers that violate the Department's rules. The Department expects that, for the majority of cases, these sanctions will involve the levying of a fine on competitive suppliers. However, for continued or

egregious violations, the Department has proposed more severe sanctions that would require the involvement of distribution companies.

One such sanction would involve the Department placing a competitive supplier on probationary status. The Department would inform distribution companies of this action and would require the distribution companies to inform customers of that supplier, on their monthly bills, that the supplier is on probationary status.⁷⁷ A more severe sanction would involve the Department precluding a competitive supplier from providing generation to new customers (the supplier would be allowed to provide service to existing customers). Again, the Department would inform distribution companies of this action and would prohibit the companies from providing billing information to, or billing services for, that supplier for new customers. Finally, the most severe of these sanctions would call for the Department to revoke the approved status of a competitive supplier.⁷⁸ The Department will prohibit distribution companies from providing customer billing information or billing services to competitive suppliers that do not have valid registrations on file with the Department or that have lost their approved status with the Department. Once informed by the Department that a competitive supplier has lost its approved status, distribution companies would inform all of that supplier's customers of the Department's

⁷⁷ As discussed in Section VII, below, under the Department's proposal, a competitive supplier placed on probation would also be required to inform its existing and prospective customers of its probationary status.

⁷⁸ As discussed in Section VII, the Department proposes that competitive suppliers be required to register initially, and maintain an approved status, with the Department as a condition of providing generation to consumers in Massachusetts.

action; those customers will become default generation service customers until alternative arrangements are made.

Consistent with the Department's restructuring goal of providing customers with the broadest possible choice of suppliers of generation, these terms and conditions will be applied in a non-discriminatory manner to all competitive suppliers that have initially registered, and have maintained their approved status, with the Department.

E. Low-Income Customer Tariff

The Department has sought to ensure that electricity is affordable to all individuals. When the Department first established a residential low-income electric rate, it stated that

As a matter of policy, the Department recognizes that electricity is a basic necessity of life in modern society. Rigid application of cost-based ratemaking principles in this case could jeopardize the ability of those with poverty-level incomes to retain electric service. A subsidized rate for low-income individuals should be available if the impact of the subsidy on nonparticipants is reasonable. The Department has recognized the unique situation of low-income customers in its regulations concerning the shut-off of electricity and other utility services (220 C.M.R. 25.03). The Supreme Judicial Court has acknowledged that rates may be set to protect low-income ratepayers, even though this requires an exception to the Department's principle of cost-based ratemaking. American Hoechst Corp. v. Department of Public Utilities, 379 Mass. 408 (1980). Accordingly, the Department finds that the Company should implement a subsidized low-income rate available to low-income residential customers.

Western Massachusetts Electric Company, D.P.U. 87-260, at 176-179 (1988). All retail electric companies in Massachusetts currently offer discounted rates to residential customers who meet eligibility requirements set forth in their tariffs.⁷⁹ Such discounts have been implemented by

⁷⁹ Typically, these tariff provisions require that a low-income discount customer (1) must be the head of a household or principal wage earner, and (2) must be currently receiving (a) Supplemental Security Income from the Social Security Administration; or (b) Aid to (continued...)

means of company-specific tariffs approved by the Department and have been upheld by the Supreme Judicial Court. See American Hoechst Corporation, 379 Mass. 408, 409; Western Massachusetts Electric Company, D.P.U. 87-260, at 176-179 (1988).

In D.P.U. 95-30, at 25, the Department stated that, consistent with the principle of universal service, electricity should be available and affordable to all customers. In the May 1 Statement at 43-45, the Department elaborated on this principle by proposing that each distribution company be required to offer a low-income tariff in which the low-income discount would produce the same subsidies as are produced under the company's low-income tariff as it exists on the effective date of the final rules, and where the eligibility criteria remain as they exist on the effective date of the final rules. In addition, our May 1 Proposal stated that (1) the low-income discount should apply to the distribution and transmission components of a customer's bill, and that during the transition, the discount should also apply to the stranded cost charge; and (2) the resulting subsidies should be allocated to rate classes using a rate base allocator and recovered from each class through a non-discriminatory, non-bypassable general access charge. Id.

No commenters opposed the Department's proposed low-income tariff. Several commenters, including the Attorney General, the Low-Income Commenters, and MECo, stated

⁷⁹(...continued)

Families with Dependent Children, Emergency Aid to the Elderly, Disabled and Children, Refugee Assistance, Medicaid, or Food Stamps from the Massachusetts Department of Public Welfare; (c) Veterans Services Benefits from the Massachusetts Veterans Services Administration; or (d) Low Income Heating Energy Assistance Program services from a certified Community Action Program Agency.

that they were attempting to reach an agreement with other interested parties on a uniform state-wide approach to a low-income tariff (Attorney General August 2, 1996 Comments at 13; Low-Income Commenters August 2, 1996 Comments at 10-11; MECo April 12, 1996 Comments at 10). The Department has not yet received such a proposal.

As in the May 1 Statement, the Department's Model Rules require that distribution companies provide the same subsidy to low-income customers as is provided under each distribution company's low-income tariff as it exists on the effective date of the final rules, and where the eligibility criteria remain as they exist on the effective date of the final rules. The Model Rules provide that the low-income discount will be applied to the distribution component of a customer's bill and, during the transition, to the stranded cost charge.⁸⁰

Currently, low-income customer subsidies are realized by applying percentage discounts to bundled rates that reflect all components of electric service (i.e., generation, transmission, and distribution). Under the Department's Model Rules, the same level of low-income customer subsidies will be realized by applying percentage discounts only to distribution rates and stranded cost access charges. Achieving the same level of subsidies may require applying a much higher percentage discount to the distribution rates and stranded cost access charges than currently is applied to the bundled rates. If these discounts rise to a level that raises rate design concerns, the Department will review them on a case-by-case basis.

F. Performance-Based Regulation

⁸⁰ The discount will not be applied to the transmission component of a customer's bill because, in the restructured electric industry, FERC will have jurisdiction over transmission rates.

1. Introduction

In Incentive Regulation, D.P.U. 94-158, at 41, 46 (1995), the Department found that it is within our ratemaking authority to modify, refine, or supplement the existing cost-based, rate-of-return regulatory framework, or to adopt new ratemaking approaches, and decided that PBR had the potential to bring real efficiency gains and lower rates to customers. The Department established therein the criteria by which PBR proposals for electric and gas companies would be evaluated. D.P.U. 94-158, at 58-64. We did not prescribe or endorse a specific mechanism in that Order, stating that "the Department will evaluate and review incentive proposals on a utility-specific basis, consistent with the general principles and guidelines stated in this Order." Id. at 19, 57, 62. In D.P.U. 95-30, at 17, the Department established that one of our principles for restructuring is to rely on incentive regulation where a fully competitive market cannot exist or does not yet exist.

In the Department's May 1 Statement at 75, we proposed that electric companies implement PBR in the form of price cap plans. The Department also set out proposed rules that would treat the first Department-reviewed plan as the model for all future plans filed with the Department. May 1 Rules at A.10.

2. Issues Raised

The written comments and oral testimony on the subject of PBR fell into several categories. Some of the commenters supported price cap plans as an appropriate form of PBR for electric companies because price cap plans: (1) track the unit-cost trend of the utility industry; (2) are an effective mechanism for controlling rates during the transition from today's fully regulated industry to a more competitive future environment; and (3) provide customers

with a predictable, smooth price trend that reflects productivity gains and continues high quality of service (Tr. 8, at 5-6, 9-10, 13; APS May 24, 1996 Comments at 10; DOER August 2, 1996 Revised Proposed Rules at 17). However, some commenters questioned whether it is appropriate to establish rules at this time for PBR and to require electric companies to propose and implement PBR plans due to the time-consuming effort of determining the correct starting point and quality of service measures (Tr. 8, at 131, 134, 139; MECo May 24, 1996 Comments at 23-25; BECo August 2, 1996 Comments at 32-33). Several commenters contended that the Department's May 1 Rules may be too prescriptive, and instead supported case-by-case review of electric companies' PBR plans, because of the unique customer mix and growth characteristics on the different utilities' systems (Tr. 8, at 12, 14, 61; MECo May 24, 1996 Comments at 23-25; FG&E May 24, 1996 Comments at 19).

3. Current Department Proposal

The Department supports PBR as an efficient method to regulate functions of electric companies where a fully competitive market cannot or does not yet exist. See D.P.U. 95-30, at 17. Based on our review of both the comments in this case and the price cap plan currently in effect for NYNEX pursuant to D.P.U. 94-50 (1995), the Department concludes that price cap plans are preferable to other types of PBR mechanisms, because price cap plans reflect pricing trends produced by a competitive market and are most likely to achieve the Department's stated objectives for PBR plans.⁸¹ We expect PBR proposals to be part of each electric company's next

⁸¹ The Department implemented price cap plans for NYNEX in D.P.U. 94-50 and for Boston Gas Company pursuant to D.P.U. 96-50 (1996).

base rate case submitted to the Department, and each will be reviewed on a case-by-case basis consistent with our criteria in D.P.U. 94-158, at 57-66.

However, in order to afford companies flexibility, the Department will not establish rules on PBR at this time; nor will we require that PBR proposals be filed with the Department in the form of price caps. The Department provides three guidelines for companies as they develop their PBR plans in addition to those provided in D.P.U. 94-158 and D.P.U. 95-30: (1) PBR plans should apply only to Department-regulated functions at the time of the filing; (2) PBR plans should not involve the stranded cost issue, which will be addressed separately; and (3) any proposal to convert a utility's distribution operations from a cost-based to a performance-based regulatory framework should include comprehensive service quality standards with significant financial incentives to guard against any degradation of traditional service quality and reliability levels.

SECTION MI -- GENERATION SUPPLIERS

The primary change that consumers of electricity will experience as a result of electric restructuring is that generation will no longer be a monopoly service provided exclusively by electric companies to consumers located in their service territories. Instead, consumers will be afforded the opportunity to enter into agreements with a variety of existing and new market participants who will provide generation in a competitive marketplace. With the implementation of restructuring, customers will have three types of electric generation choices. First, customers may enter into agreements with competitive suppliers for the provision of generation. The price for this type of service will not be regulated. Second, customers will still be able to buy power directly from their electric distribution company at a price regulated by the Department. This alternative is called standard offer service and will be available, for five years, to customers who have never received generation from a competitive supplier. Third, customers who have received generation from a competitive supplier but who, for any reason, have stopped receiving such generation will be able to receive default generation service, provided by distribution companies at a market price.

With the entrance of new market participants, there is the possibility that some may seek to take unfair advantage of consumers, especially during the transition from a closely-regulated industry to a more competitive industry. The Department intends to implement consumer protections by imposing certain requirements upon competitive suppliers, such as the obligation to register with the Department. The Department's residential billing regulations will apply to distribution companies and to those competitive suppliers that issue bills directly to customers. In addition, consumers will continue to have the termination protections set forth in the Department's termination regulations. Because termination of electric service requires a physical disconnection from the distribution system and this can result only from action taken by distribution companies, the termination provisions included in these regulations will apply only to distribution companies.

The Department's Model Rules would implement consumer protection requirements for competitive suppliers and distribution companies, including supplier registration requirements. The Department proposes legislation to obtain non-price jurisdiction over competitive suppliers and to authorize the Department to issue rules regarding the provision of standard offer and default service by distribution companies.

SECTION VII -- GENERATION SUPPLIERS

A. Introduction

In D.P.U. 95-30, at 18-19, we stated that one basic principle of restructuring was to provide the broadest possible customer choice. In the restructured industry, generation will no longer be a monopoly service provided exclusively by vertically integrated electric companies to consumers located in their service territories. Instead, consumers will have the option to enter into contracts with a variety of existing and new market participants who will provide unbundled generation in a competitive marketplace. The price for competitive generation will be unregulated, but key non-price aspects of the contractual relationship between competitive suppliers and electricity consumers will be regulated by the Department.

The restructured electric industry will contain a greater number and variety of competitive suppliers (e.g., generators, both utility-affiliated and independent, load aggregators, electricity marketers and brokers) that will seek to combine groups of customers and match them with the available supply of generation, leading to a multitude of combinations of customer groups, supply portfolios, and payment terms and conditions. May 1 Statement at 34. With the entry of new players, there is the possibility that some may seek to take unfair advantage of customers, especially during the transition from a closely regulated industry to a fully competitive market. Id. It is our obligation to anticipate, and to implement measures to guard against, such abuses. The Department's regulation of competitive suppliers will deal almost exclusively with consumer protection issues. We firmly believe that, once the competitive market for generation has matured, the greatest measure of protection for consumers will be derived from their ability

to switch generation suppliers. During the transition to a fully competitive market, however, we consider it essential that consumer protections be explicitly provided through regulation.

Customers who do not choose a competitive supplier will receive standard offer service. It will be provided by the distribution company in whose service territory the customer resides. Both price and non-price terms of standard offer service will be regulated by the Department. Standard offer service will be available to customers for the initial five years of the transition.

Finally, default service will be available to those customers who have received generation from a competitive supplier but who, for any reason, have stopped receiving such service. The Department anticipates that distribution companies will procure this service through purchases from the region's energy spot market, the costs of which will be passed through in full to customers.

This section discusses (1) the requirements for competitive suppliers, including sanctions for failure to comply with our requirements, (2) the generation that will be offered by distribution companies, and (3) the residential consumer protection regulations that will apply to competitive suppliers and distribution companies.

B. Competitive Supplier Requirements

1. Introduction

In our May 1 Proposed Rules, the Department defined a competitive supplier as any supplier of generation to retail customers, including load aggregators, power marketers, and brokers. Because the primary exposure that customers will have to the competitive generation market is through load aggregators and other sellers of generation, it is important that all sellers of generation be included in the Department's definition of competitive suppliers and thus be

subject to the Department's regulations. Therefore, the term competitive supplier, as defined in our Model Rules, shall include any entity, including electric company affiliates, engaging in generating, buying, aggregating, marketing or brokering electricity, and selling it to end-use customers at prices unregulated by the Department.

In this section, we discuss issues raised and the current Department proposals for the following: (1) registration requirements, including contact numbers and registration fees; (2) telemarketing; (3) switching customers; (4) financial assurances; (5) supply information disclosure; and (6) enforcement of supplier requirements.

2. Registration Requirements

In the May 1 Statement at 34, the Department proposed limited informational requirements for generators, aggregators, marketers and brokers, stating that, "in the interest of ensuring that the barriers to entry for new players in the market are minimized, the Department seeks to avoid undue regulatory burdens."

Several commenters requested that the Department institute more extensive registration requirements for competitive suppliers. Commenters urged us to require that competitive suppliers (1) provide more specific financial assurances, (2) adhere to consumer protection laws and dispute resolution procedures, and (3) submit to a local municipal approval process (see e.g., Barnstable County Commissioners August 2, 1996 Comments at 7, 10-11). The Department has considered the comments and has incorporated into its Model Rules those suggestions that are likely to protect consumers while facilitating a smooth transition to full competition, one of the

principles articulated in D.P.U. 95-30.⁸² Specifically, the Department proposes to require competitive suppliers to register with the Department, providing basic information about themselves, paying an annual filing fee and providing a contact number.

a. Contact Number

Contracts will govern the relationship between competitive suppliers and their customers; therefore, it is essential that customers be able to contact their suppliers with questions about contract terms, billing, prices, and other services or complaints. In the May 1 Proposed Rules, the Department proposed that each competitive supplier provide the name, title and telephone number of a customer service contact person. Because many competitive suppliers may be located outside of the local telephone calling area of their customers, the Department finds it necessary and appropriate to include in its Model Rules the requirement that each competitive supplier maintain, and publish in the telephone directories of each city and town in which it does business, as well as on its bills, an "800" or toll-free telephone number for customer service calls.

b. Registration Fee

In the May 1 Rules, the Department did not propose that a fee be included with each competitive supplier's registration application. Many commenters recommended that a competitive supplier registration fee be required and that it be based on the cost of Department resources needed for the review of competitive supplier registration filings (MECo August 2,

⁸² Other suggestions, such as the Barnstable County Commissioners' proposed local approval process, are not incorporated at this time because they were too cumbersome, anticompetitive or redundant to those that have been adopted.

1996 Comments at 6; Barnstable County Commissioners August 2, 1996 Comments at 12-13).

The Department anticipates that additional resources will be required to process applications and that the level of resources required will be directly proportional to the number of applicants.

Therefore, the Department has included in the Model Rules a requirement that any competitive supplier registrant pay a fee of \$500.00 to support the costs of reviewing its registration application.

3. Telemarketing

The May 1 Rules did not contain any provisions regarding telemarketing or possible limitations on marketing activity by competitive suppliers. However, in the public hearings conducted in this docket, members of the public expressed significant concern that they would be inundated with telephone solicitations from suppliers. The Department shares this concern, particularly as aggressive telemarketing could have a counterproductive effect by undermining consumer confidence in, and support for, the electric restructuring process. Few issues provoked such strong reaction by consumers during the Department's public meetings as the prospect of consumers receiving large numbers of unwanted telephone solicitations.

Federal requirements regarding telemarketing are contained in the Federal Trade Commission's Telemarketing and Consumer Abuse Protection Act, 15 U.S.C. §§ 6101-6108 and counterpart regulations 16 C.F.R. Ch. 1, Part 310 (Telemarketing Sales Rule) and the Federal Communications Commission's Telephone Consumer Protection Act, 47 U.S.C. §§ 227-228. See 18 U.S.C. § 2325 (Telemarketing Fraud). These statutes and regulations prohibit certain telemarketing activity, such as (1) calling a prospective customer's home before 8:00 a.m. and after 9:00 p.m.; (2) failing to disclose all material information, such as the total costs to purchase,

receive or use goods or services, all material restrictions, relevant policies regarding refunds; (3) initiating an outbound call to a person who has previously stated that he or she does not wish to receive such telephone calls; or (4) failing to make required disclosures, such as the identity of the seller, or that the purpose of the call is to sell goods or services. These statutes and regulations not only provide for federal enforcement of the provisions, but also permit any state Attorney General (or any private person as well) to bring a civil enforcement action in federal court.

The Department finds that the federal statutes and regulations provide adequate safeguards for customers dealing with competitive suppliers in the restructured industry. Therefore, the Department does not propose to impose additional restrictions on telemarketing. The Department will focus on increasing consumer education efforts regarding the federal statutes and regulations and encourage consumers to protect their rights where abuses occur. However, in the interest of achieving a smooth transition to a competitive market, we strongly urge competitive suppliers to voluntarily restrict their telemarketing activities beyond the minimum legal requirements. The industry must identify other, less intrusive means of advertising and solicitation if electric restructuring is to escape the stigma that still, twelve years later, attaches to the initial experience of long-distance telecommunications deregulation in the minds of many consumers. At this time, the Department invites further discussion among competitive suppliers, distribution companies and consumer representatives regarding administratively feasible mechanisms.

4. Switching Customers

In the telecommunications industry, deregulation initially led to significant problems with the unauthorized switching of customers from one long-distance carrier to another.⁸³ In light of these problems, the Department stated in the May 1 Proposed Rules that any competitive supplier wishing to switch a customer from another competitive supplier to its own service would have to obtain that customer's written or other verifiable authorization. Commenters agreed that the Department should prohibit the unauthorized switching of a customer and should impose penalties on any competitive supplier who is found to have engaged in the unauthorized switching of customers to its service (DOER May 24, 1996 Comments at 18; WMECo May 24, 1996 Comments at 37-39; RAM May 24, 1996 Comments at 1; NCLC April 12, 1996 Comments at 21-22; Enron May 24, 1996 Comments at 13).

The Federal Communications Commission ("FCC") has promulgated rules on customer switching in the telecommunications industry. 47 C.F.R. Subpart K (Changing Long Distance Service); Subpart L (Restrictions on Telephone Solicitation); Policies and Rules Concerning Changing Long Distance Carriers, 7 FCC Rcd No. 3 (Jan. 9, 1992). The FCC requires that a long-distance carrier obtain a customer's authorization to switch service by one of the following means: (1) written authorization; (2) electronic authorization, such as a voice response unit; (3) a qualified and independent third party operating in a physically separate location who obtains oral authorization, including appropriate verification data such as Social Security number; or (4) an informational mailing to the new customer that includes a request for confirmation of the telemarketing order, the name of the newly requested carrier, a description of terms, a postpaid

⁸³ The practice of switching a customer's supplier without that customer's authorization is known as "slamming" in the telecommunications industry.

card that the customer may use to confirm, deny, or cancel a service order, and a contact number for consumer complaints.

Our Model Rules for switching customers mirror the FCC regulations. Competitive suppliers will be required to obtain authorization from a prospective customer by one of the four methods described above. In addition, distribution companies will be required to obtain confirmation that the customer has consented to switch electric generation before making the change.

5. Financial Assurances

In the May 1 Proposed Rules, the Department proposed that, in order to register as a competitive supplier, a party must, among other things, provide evidence of financial soundness such as surety bonds, a recent financial statement or some other mechanism, as determined by the Department. The purpose of requiring evidence of financial soundness is to ensure that competitive suppliers operating in Massachusetts have the financial wherewithal to provide generation in a reliable manner and an incentive to perform on their contractual obligations.

The Department will determine on a case-by-case basis what type of financial assurance is needed. Among the types we will consider are an appropriate market rating, a letter of credit and evidence that the competitive supplier has posted a bond⁸⁴ with the ISO.⁸⁵

⁸⁴ Bonds will not be used as a means of imposing a penalty because we plan to seek legislation giving the Department the authority to impose fines upon competitive suppliers who are found to have violated our supplier requirements (see Section VII.B.7, Enforcement, below).

⁸⁵ The Department notes that the operator of the bulk power system may require a bond from any competitive supplier in order to guard against default of any financial obligation (continued...)

6. Supply Information Disclosure

Consumer choice is a cornerstone of an efficient competitive market. In order for choice to be meaningful to consumers, adequate information must be available and presented on bills and in marketing information in a straightforward and comprehensible way. Two types of information that are essential to consumers are price information and environmental impact information. A recent resolution by the National Association of Regulatory Utility Commissioners ("NARUC") recognizes the importance of comprehensive consumer information. The NARUC resolution "supports initiatives leading to minimum, enforceable, uniform standards for the form and content of disclosure and labeling that would allow retail and wholesale consumers to easily compare price, price variability, resource mix, and environmental characteristics of their electricity purchases" (Resolution in Support of Customer "Right-to-Know" and Product Labeling Standards for the Retail Marketing of Electricity, Passed by NARUC Executive Committee, November 1996).⁸⁶

One of the benefits of customer choice is that customers who have a preference for particular types of supply resources will have the opportunity to express their preference through their resource selection. In an open market system, the cumulative decisions of many individual buyers will translate into a changing energy supply mix over time that should better reflect the

⁸⁵(...continued)

to the system operator. This requirement may satisfy the Department's bonding objectives.

⁸⁶ We note that requirements governing such information disclosure will be most effective if implemented on a consistent, regionwide or nationwide basis since competitive suppliers are likely to be operating in several states simultaneously. We commit our best efforts to develop support for such a regional or national standard.

preferences and cost tolerances of society than does the current utility-planned system. For example, customers who are concerned about the environmental consequences of their buying habits might choose to buy electricity from a supplier that gets power only from "clean" generation such as wind power and small-scale hydropower (such power is often termed "green" power).

Several commenters supported the idea that companies should disclose to customers their resource mix and associated air emissions (see Tr. 11, at 8, 17, 23). For example, in the New Hampshire and Massachusetts retail choice pilots, many suppliers are making or have made environmental claims in marketing their electricity.⁸⁷ Because competitive suppliers are likely to make claims about the content of their generation mix and because accurate information is critical to effective competition, the Department finds it necessary to impose an information disclosure requirement on competitive suppliers.

To make the task of comparing competing offers easier for consumers, the Department intends to develop a standard format for electricity labelling. To do so, the Department will convene a collaborative in early 1997. Such labels would appear on each competitive supplier's bills and marketing materials. We expect the labels to include basic information about the sources of the electricity being delivered -- including the fuel mix of the generating units being dispatched and the amount of air pollutants that are emitted from those units. In addition, the Department expects distribution companies and competitive suppliers that issue bills to work

⁸⁷ Two-thirds of the suppliers in the MECo retail pilot program that are marketing to residential customers are using the environment as a marketing tool (D.P.U. 96-25, MECo Pilot Program).

with the Department to develop a standard pricing format for bills,⁸⁸ which may include a per-unit charge (see Section VI). See 220 C.M.R. § 25.02(11) (requiring Consumer Division approval of all written notices required by 220 C.M.R. § 25.00).

To date, there has been no proposal presented to the Department that provides a method by which any company or supplier could actually sell a particular type of generation from its resource mix to a particular retail customer and guarantee that only the particular resource would be dispatched on behalf of that customer. Such a system would require detailed accounting to ensure that desirable resources were not oversold. The Department recognizes that resource portfolios are developed through complex planning procedures and that the actual mix of resources that are producing electricity on any given day may not be exactly reflected in a supplier's average resource mix or other summary accounting that might appear on a standard label. In addition, it is unclear whether dispatch decisions for each particular unit would change based on customer preference.⁸⁹

Therefore, the Department proposes to prevent the marketing of any subsection of a supplier's mix. Rather, in order to allow suppliers to be evaluated on a comparable basis, the Department intends to require that each supplier's label information reflect the fuel and emissions profile of the total company mix, including owned generation and long-term purchases. In

⁸⁸ This requirement will apply to default and standard offer service provided by distribution companies.

⁸⁹ As discussed in Section III, a system operator is expected to dispatch generating units in its operation region based on bid prices from unit operators. If a consumer is paying for a particular resource on the basis that it will be dispatched, that unit operator will have to bid a low enough price (conceivably zero) to ensure that the unit will be dispatched (sometimes known as a "must-run unit").

addition, competitive suppliers must indicate to customers (on bills and in marketing materials) when a portion of the mix will be obtained through the spot market. Competitive suppliers also will be required to present to their customers and the Department an annual report of the average resource mix of their owned generation and power purchases. Suppliers must update such information quarterly and present it on monthly bills.⁹⁰ The Department will consider proposals from companies, suppliers, or other entities that outline methods for plant-by-plant marketing and sales that are workable and verifiable.

It is essential that the fuel source and emissions information contained in labels be verifiable. Therefore, the Department will advocate that the FERC, the United States Department of Energy, or the United States Environmental Protection Agency establish the ISO as an information clearinghouse (see Section VIII).

As an additional measure to ensure customers' access to information, the Department proposes to require some specific standards for bills and contracts issued by competitive suppliers. The Model Rules state that bills and contracts shall be written in plain, simple language; contain clearly distinguishable rates and terms of service; identify a dispute resolution process that is available if the customer is not satisfied with the service; include the Department's Consumer Division telephone number; include a provision giving customers 10 days' prior notice of discontinuance of contracts for supply of electricity; and explain that the customer must notify the competitive supplier and distribution company if the customer chooses to terminate service.

⁹⁰ Such information must appear on all monthly bills since some customers will be switching suppliers mid-year and should have the information available at any time.

7. Enforcement of Competitive Supplier Requirements

The Department has proposed non-price regulations for competitive suppliers that include sanctions for violations of our Model Rules.⁹¹ The sanctions will vary with the severity and the wilfulness of the violation. First, we have set forth in the Model Rules a range of fines. These fines will be imposed for violations of supplier requirements against individual customers. In addition, we will maintain a list of competitive suppliers in "good standing," *i.e.*, in compliance with our supplier requirements. If we determine that a pattern of misconduct exists or that a violation was egregious, we may find that a competitive supplier is on probation or no longer in good standing with the Department. A competitive supplier determined to be on probation may be required to so inform both existing and prospective customers. A more serious penalty will be to prohibit a competitive supplier from signing up new customers for a specified period of time. Finally, the most severe penalty we may impose would be to revoke a competitive supplier's good standing; distribution companies would be prohibited from doing business with that competitive supplier. These sanctions will only be imposed following a hearing before the Department in the same manner that we handle consumer complaints, *i.e.*, an informal hearing before the Consumer Division pursuant to 220 C.M.R. § 25.02(4) with the right to seek an adjudicatory hearing (as defined in G.L. c. 30A) before the Department if a party is dissatisfied with the result of the informal hearing. The Department notes that it views the imposition of sanctions upon competitive suppliers (including utility retail affiliates) as a transition mechanism

⁹¹ Distribution companies will not be able to impose such sanctions themselves; however, they are expected to file complaints about violations by competitive suppliers.

and intends to revisit the issue as necessary to determine if greater or lesser regulation on the part of the Department is warranted.

Finally, the Department recognizes that customers of competitive suppliers may need assistance by the Department's Consumer Division during the transition on issues that are not addressed in supplier requirements. To this end, the Department, within available resources,⁹² will provide informal mediation or dispute resolution services.⁹³

The Department also will play an active monitoring role during the transition. We will collect and maintain for public review statistics on frequency of complaints and competitive supplier responsiveness to such complaints. To that end, competitive suppliers will be required to maintain a record of all consumer complaints received in all jurisdictions where they operate. The Department intends this monitoring function to help smooth the transition to competition. We expect that, in time, the Department's only involvement with consumer complaints against competitive suppliers may be to make available to prospective customers a record of such complaints.

C. Generation Offered by Distribution Companies

1. Introduction

The Department anticipates that a large number of customers will decide, at least initially, not to participate in the competitive market for generation. In addition, at any particular time,

⁹² The Department notes that this type of assistance will require significant additional resources.

⁹³ However, customers or competitive suppliers dissatisfied with the results of this service will not be able to appeal to the Department for a hearing pursuant to G.L. c. 30A; rather, they will have to turn to the court system for resolution.

some customers who previously had purchased generation from a competitive supplier will, for various reasons, not be doing so. This section addresses the generation that will be available to customers who are not purchasing service from competitive suppliers.

In the May 1 Statement at 45, the Department stated that, to ensure that no customer goes without electricity, distribution companies will be required to provide basic generation to customers who, for whatever reason, are not receiving generation from a competitive supplier. The Department presented two alternatives for distribution companies with affiliated generators to procure basic generation: (1) procure generation through the Power Exchange, priced at the market clearing price; and (2) procure generation from any source, at a price approved by the Department (id. at 45-46). Distribution companies with no affiliated generation company would have the flexibility to procure generation from any source (id.)

2. Issues Raised

There was wide agreement among commenters that distribution companies should be responsible for ensuring that electric service is available to those customers who are not receiving generation from a competitive supplier (Attorney General August 8, 1996 Comments at 11-12; BECo August 2, 1996 Comments at 27-28; CPC August 2, 1996 Comments at 13; Com/Electric August 2, 1996 Comments at 40-41; Enron August 2, 1996 Comments at 12; WMECo August 2, 1996 Comments at 21-22). During the course of this proceeding, the Department heard testimony regarding the differences between those customers who do not select a competitive supplier at the time that retail access is first introduced and those customers who, for whatever reason, are temporarily not receiving generation from competitive suppliers (Tr. 7, at 31, 45, 58-65; BECo August 2, 1996 Comments at 27-28; MECo August 2, 1996 Comments at 37-38).

In addition, there was disagreement among commenters regarding which generating units should back up, or support, basic service. Three approaches were discussed.

Most of the electric companies supported an approach in which distribution companies would have wide discretion regarding the generating units that would support basic service. In particular, these companies proposed that distribution companies not be precluded from using their affiliated generation companies. Supporters asserted that this approach would be most consistent with a smooth transition for those customers who do not choose to procure generation from the competitive market. Supporters of this approach generally recommended that basic service prices be based on current generation prices, with an annual adjustment for inflation (BEC Co August 2, 1996 Comments at 26-32; Com/Electric August 2, 1996 Comments at 40-42; EEC Co August 2, 1996 Comments at 7-8; FG&E August 2, 1996 Comments at 6; MEC Co August 2, 1996 Comments at 38-41; WMEC Co August 2, 1996 Comments at 21-24).

A second approach would require distribution companies to procure generation for basic service through competitive solicitations. Some commenters argued that affiliated generation companies should not be allowed to participate in these solicitations, citing concerns about self-dealing and market power that would not serve customer interests (AIM August 2, 1996 Comments at 23; APS August 2, 1996 Comments at 1). Enron and CPC stated that an affiliated generation company should not be prohibited from participating in a distribution company's solicitation, as long as the following conditions were met: (1) at least three or four suppliers⁹⁴ would be selected; (2) bids would be evaluated strictly on a price basis; and (3) all winning

⁹⁴ Enron stated that at least three suppliers should be selected, while CPC stated that at least four suppliers should be selected.

suppliers would be required to provide services at the lowest bid price (CPC August 2, 1996 Comments at 14-15; Enron August 2, 1996 Comments at 13-14). CPC added a fourth condition, that the solicitation cover a time period of one year (CPC August 2, 1996 Comments at 14). CPC maintained that, because bids would be reviewed on a price basis only, Department review should be minimal (*id.* at 15). Enron asserted that requiring a competitive solicitation would ensure that basic service customers receive directly the benefits of competition, adding that the notion of basic service that would preserve the monopoly of the incumbent utility over this potentially large group of customers is incompatible with a truly competitive generation market (Enron August 2, 1996 Comments at 9, 15).

Finally, a third approach would require distribution companies to purchase basic service generation from a power exchange approved by the Department (DOER August 2, 1996 Comments at 26-30; TEC August 2, 1996 Comments at 10-11).

3. Current Department Proposal

a. Introduction

Consistent with the comments and testimony presented during the course of this proceeding, the Department's Model Rules require distribution companies to make generation available to those customers who, for whatever reason, are not receiving generation from a competitive supplier. The Department finds persuasive the commenters who differentiated between those customers who do not select a competitive supplier at the time that retail access is first introduced and those customers who previously received generation from competitive suppliers but, for whatever reason, will not be not doing so at any particular time. Therefore, the Department's Model Rules provide for two types of generation that distribution companies must

make available to customers: (1) standard offer generation service, which will be available to those customers who have never received generation from a competitive supplier; and (2) default generation service, which will be available to those customers who have received generation from a competitive supplier but who, for any reason, have stopped receiving such service. The Department discusses these below.

b. Standard Offer Generation Service

As stated above, the Department anticipates that a large number of customers will decide, at least initially, not to participate in the competitive market for generation. Customers may choose not to participate in the competitive market for a variety of reasons -- they may be satisfied with the electric service they currently receive, they may not be aware of the new options available to them, they may be unable to decide among the many new options, or it simply might not matter much to them. The Department has no intention of forcing any customer into the competitive generation market before that customer is comfortable with such a move. Therefore, the Department's Model Rules require distribution companies to make standard offer generation service available after the introduction of direct access for retail consumers ("retail access date") to those customers who have not received generation from a competitive supplier. Standard offer generation service will be available for a period of five years, or as otherwise determined by the Department.

To minimize consumer confusion, the Department's current proposal requires that standard offer service be substantially similar to the generation currently provided by electric companies. Standard offer customers will receive a single bill for electric service from their distribution companies. While the bill will be unbundled for these customers as for all

customers, it should otherwise appear to these customers that they are continuing to receive bundled electric service, with distribution companies replacing the integrated electric companies. The Department will regulate the price charged for standard offer service.

Each distribution company will be required to file, for Department approval, proposed standard offer prices, and the terms and conditions that will govern the manner in which the company will provide standard offer service. These are not prescribed in detail in the Department's Model Rules. Instead, each distribution company will have the flexibility to propose standard offer service that best suits that company's situation. However, all standard offer proposals should be consistent with the following guidelines.

First, consistent with the Department's objectives of minimizing confusion and providing near-term rate relief, standard offer service initially should be priced at a level no higher than current electric rates. Preferably, the initial standard offer prices would provide customers with discounts compared to these rates. In establishing their standard offer prices, distribution companies need to strike an appropriate balance between setting prices at levels that provide near-term rate reductions, and establishing price paths for the five-year period that encourage consumers to participate in the competitive generation market. The Department will review each distribution company's standard offer pricing proposal. To the extent that a company's standard offer proposal provides near-term rate relief and is the result of a competitive solicitation, the Department's review should be minimal.

Second, the provision of standard offer service must not result in additional stranded costs for distribution companies. Contracts with suppliers of standard offer generation must be structured so that the suppliers bear the risk of reduced standard offer load due to customers moving to competitive suppliers.

The Department acknowledges the concern of some commenters that allowing affiliated generators to enter into contracts with distribution companies for standard offer service would allow the affiliated generators to perpetuate the generation monopoly they currently hold in each distribution company's service territory. The Department's proposal for standard offer service addresses this concern in two ways. First, because the five-year price path for standard offer service will be established before the procurement of generation for this service, distribution companies will have a strong financial motivation to seek out the least expensive generation, whether it is from an affiliate or not.⁹⁵ Any decision by a distribution company to favor an affiliated generating company would be at shareholders' risk. Thus, although the Department's proposal does not require distribution companies to issue competitive solicitations for procurement of standard offer generation resources, the proposal should provide sufficient incentive for companies to do so.⁹⁶ Second, distribution companies will be precluded from using standard offer service as a marketing tool for themselves or their generation affiliates. This

⁹⁵ The Department's proposal essentially would establish a price cap ratemaking mechanism for standard offer service.

⁹⁶ Distribution companies will have an additional incentive to procure generation competitively for standard offer service in that, as stated above, the Department's review of a company's standard offer pricing proposal should be minimal if the prices are a result of a competitive solicitation.

should ensure that competitive suppliers have ample opportunity to successfully market their services to all electricity consumers in Massachusetts.

Standard offer service will be available for a period of five years, after which any remaining standard offer customers will automatically be transferred to default generation service. Once a customer enters into a contract with a competitive supplier, that customer will not be eligible to receive standard offer service at a later date, except that distribution companies may propose that such customers be allowed to return to standard offer service within a specified period, particularly during the first years of retail access. In addition, a customer that establishes a new account in a distribution company's service territory after the effective date of the Department's final rules will not be eligible for standard offer service.

c. Default Generation Service

The Department's Model Rules provide that those customers who previously have received generation from competitive suppliers but who, for any reason, have stopped receiving such service will receive default generation service ("default service") through their distribution companies.⁹⁷ Unlike standard offer service, default service is not intended for those customers who do not choose a competitive supplier. Instead, default service is intended to act as a safety net for all customers. The Department anticipates that most customers will receive default service through their distribution companies as a temporary measure, while they seek out other competitive generation suppliers.

⁹⁷ In addition, when standard offer service is no longer available, any remaining standard offer customers will receive default service.

Under the Department's Model Rules, the price for default service shall be based on the spot market clearing prices, as reported by the bulk power system operator.⁹⁸ The Department will not preclude distribution companies from procuring generation for default service from sources other than the spot market (e.g., through bilateral contracts); however, prices will be set at market-clearing levels. Because distribution companies will act as liaisons between default service customers and the competitive generation market, default service should impose no requirements on distribution companies in terms of contracting for generation.⁹⁹

The Department's Model Rules require distribution companies to file terms and conditions for default service for Department approval. Because default service will act as safety net electric service, it would be inappropriate for the Department to impose a restriction on the number of times that customers may exit from and return to default service.¹⁰⁰ However, it may be appropriate for distribution companies to propose that a customer be required to remain on default service for a minimum time period.

D. Department Consumer Protection Regulations

1. Introduction

⁹⁸ The Department anticipates that a fully functioning spot market will quickly emerge following restructuring, noting that a spot market for wholesale power currently exists.

⁹⁹ The Department notes that, to the extent that the latest NEPOOL reform proposal includes a provision that requires that all customers be served by load-serving entities, then the distribution companies would be the load serving entities for default service customers. Under this scenario, the Department's proposal would suggest that distribution companies would purchase all of their energy and capacity requirements from the NEPOOL spot market.

¹⁰⁰ This freedom of choice should not present a hardship for distribution companies, since they will not be exposed to the risk of owning or contracting for such power; all costs would be billed through to customers.

The Department currently maintains, in a comprehensive fashion, many utility consumer protections, including the procedures by which all electric companies subject to our jurisdiction handle residential billing and termination of service. 220 C.M.R. §§ 25 et seq. ("Section 25");¹⁰¹ see Cambridge Electric Light Company v. Department of Public Utilities, 364 Mass. 474 (1973) (finding Department regulations concerning billing and termination valid). Section 25 consumer protections include (1) a winter moratorium on termination of service to electric heat customers that demonstrate financial hardship; (2) prohibition of termination of service to elderly and ill customers and to customers who have an infant, and who can demonstrate financial hardship; (3) restrictions on termination of service to tenants whose electric bills are paid by their landlord; (4) a process for dispute resolution, including an adjudicatory hearing before the Department pursuant to G.L. c. 30A; and (5) notification and timing requirements for billing and termination of service. In addition, G.L. c. 164, § 94D prevents electric companies from imposing late payment penalties upon residential customers; and G.L. c. 164, § 125 prohibits an electric company from denying service to a customer based upon the default of the previous occupant of that customer's residence.

In a restructured industry, consumer protection will continue to be important, and it may have to take new forms and apply to new entities in order to be effective. In this section, the Department discusses what level of consumer protection is appropriate for consumers in the

¹⁰¹ Section 25 implements, in part, the Department's authority under G.L. c. 164, § 124A (serious illness and financial hardship); G.L. c. 164, § 124E (elderly residents); G.L. c. 164, § 124F (electric service is used to provide heat or to operate the heating system of the customer's unit or building and financial hardship); G.L. c. 164, § 124H (infant less than twelve months old and financial hardship); G.L. c. 164, § 124D (landlord-customers).

restructured industry, and proposes consumer protection requirements applicable to distribution companies and to competitive suppliers.

2. Consumer Protections with Distribution Companies

The Department intends to apply all existing consumer protection requirements to all distribution companies and to require that distribution companies provide standard offer and default service. In D.P.U. 95-30, at 25, we stated that we would continue our commitment to ensuring that electricity remains available and affordable to all customers. We also stated that low-income customers should enjoy a level of protection equivalent to that currently provided. May 1 Statement at 43; D.P.U. 95-30, at 25. Particularly during the transition, continued emphasis on consumer protection will be an important aspect of building consumer confidence in competition in the electric industry.

Commenters generally agreed that in the transition to a restructured industry, consumer protections would continue to play an important role (Tr. 9, at 82-89). No commenters suggested consumer protection requirements should not be applied to distribution companies, although some commenters did encourage the Department to consider revising the existing regulations to make them less cumbersome (Tr. 7, at 231-233; Tr. 9, at 82-89).

Under our Model Rules, distribution companies will have the obligation to connect customers to the grid and the ability to physically disconnect customers from the grid. In addition, distribution companies will be responsible for providing standard offer service initially, and default service to those customers not receiving generation from a competitive supplier. Distribution companies will provide vital components of an essential service which must continue

to be regulated. To ensure that the current level of customer protections remains in place, the Department proposes to apply Section 25 in its entirety to distribution companies.

We impose consumer protections upon electric companies pursuant to our authority under G.L. c. 164, §§ 76C, 124A, 124D, 124E, 124F and 124H. In G.L. c. 164, § 1, an electric company is defined as:

a corporation organized under the laws of the commonwealth for the purpose of making by means of water power, steam power or otherwise and selling, or distributing and selling, electricity within the commonwealth, or authorized by special act so to do, even though subsequently authorized to make or sell gas; provided, however, that electric company shall not mean an alternative energy producer.

In the restructured industry, distribution companies will be distributing electricity but they will not be "selling electricity" in the sense of the current definition of an electric company. The offering of standard offer service and default service may be construed to constitute the selling of electricity, in which case distribution companies arguably would remain regulated under our current statute. To resolve any uncertainties, we propose legislation to clarify that distribution companies are subject to our jurisdiction, including our billing and termination regulations, and that they have the obligation to connect customers to the grid and to provide standard offer and default service (Legislative Proposal, Appendix B, SECTION 10 (Section 1B(5) Principles for a Restructured Industry). In addition, there are numerous statutory provisions dealing with various aspects of what are currently electric company obligations, that would become distribution

company obligations under our Model Rules.¹⁰² The Department's Legislative Proposal addresses the transfer of these obligations and rights to distribution companies.

3. Consumer Protections with Competitive Suppliers

a. Introduction

In determining to what extent the Department's billing and termination regulations should be applied to competitive suppliers, the Department must balance the goal of maintaining consumer protections equivalent to those currently in effect with the goal of encouraging competition by reducing government regulations where possible. In the May 1 Statement at 44-45, we indicated that we would not impose consumer protection requirements upon competitive suppliers, other than minimal registration requirements and a prohibition against such practices as unauthorized switching of customers. In the Model Rules, we have modified that position by requiring competitive suppliers to comply with our existing billing regulations when the competitive supplier issues bills.

b. Issues Raised

Commenters generally favored imposing some consumer protection regulations upon competitive suppliers as a matter of public policy (see e.g., Barnstable County Commissioners August 2, 1996 Comments at 5; Tr. 7, at 233-234). Electric companies such as EEC0 and BEC0 argued that it would not be fair to impose such requirements upon them as distribution companies without applying the regulations equally to competitive suppliers (Tr. 7, at 224-226).

¹⁰² G.L. c. 164, § 92 discusses the right of a user to electricity; G.L. c. 164, § 119A covers the format of electric bills; G.L. c. 164, § 124 authorizes electric companies to physically disconnect customers; and G.L. c. 164, § 94D prevents electric companies from collecting interest on late payments.

Moreover, Enron noted that there could be advantages to competitive suppliers from imposition of consumer protections (id. at 224-226). There would be a marketing advantage in being able to state to prospective customers that they would not lose their existing consumer protections if they were to switch to a competitive supplier (id.). Enron also noted that, arguably, customers might find standard offer service from the existing electric companies more attractive than competitive generation because it came with full consumer protections, so that, without consumer protections, competitors would be at a disadvantage (id. at 229). However, Alternate Power Source argued that imposing a regulatory scheme of consumer protections upon otherwise largely unregulated competitive suppliers would be inconsistent with the purposes of introducing competition to the electric industry (id. at 230-231).

There was no agreement on which of the Department's existing regulations should apply to competitive suppliers (see Enron August 2, 1996 Comments at 17-21, 40-41; Environmental Futures August 2, 1996 Comments). For example, Enron stated that "the cumbersome adjudicatory proceedings of G.L. c. 30A" should not be used for competitive suppliers; rather, Enron proposed that the Department institute a system of alternative dispute resolution except for revocation of certification proceedings, which Enron thought required a hearing (Enron August 2, 1996 Comments at 13). However, the National Consumer Law Center disagreed, stating that the Department's administrative hearing process was more appropriate for resolving consumer complaints than court actions under G.L. c. 93A (Tr. 7, at 231-233). In addition, Enron proposed that competitive suppliers conform their billing procedures to those already mandated by the Department's regulations (Enron August 2, 1996 Comments at 14-15).

c. Current Department Proposal

At issue for the Department is which, if any, of our consumer protections, such as billing requirements, termination protections and dispute resolution, to impose on competitive suppliers. Billing currently is done by vertically-integrated electric companies. In the restructured industry, it may be done by either the distribution company, or, if customers choose, by a competitive supplier. In these circumstances, to protect customers, the Department intends to apply its billing regulations to both distribution companies and competitive suppliers who bill customers. To do otherwise would be to subject competitive generation customers to less consumer protection merely because of the billing method they chose. Moreover, it is appropriate for the competitive supplier or other billing entity (where a distribution company delegates its billing authority) to conform its billing practices to the Department's existing regulations so that customers do not have to deal with potentially different systems of billing. Therefore, the Department proposes that competitive suppliers who issue separate bills for generation and/or competitive suppliers who arrange to bill for all components of electric service be required to conform to the Department's billing requirements.¹⁰³

In today's electric industry, the term "termination of service" means that electric service to a customer's residence is completely terminated (i.e., the electric company physically disconnects its distribution wires from the customer's residence and the customer no longer has electric service). In the restructured electric industry, termination of electric service can result only from action by a regulated distribution company, not a competitive supplier. As noted earlier, if a

¹⁰³ The Department intends that distribution companies retain their billing and metering function for generation, transmission and distribution charges. Under our Model Rules, however, customers may select an alternative billing arrangement.

competitive supplier terminates or fails to supply power pursuant to its generation contract with a customer, that customer will not lose electric service -- instead, the customer will receive default service until he or she obtains a new competitive supplier.¹⁰⁴ Since termination of service can only result from action by a distribution company, not a competitive supplier, only the distribution company will be regulated for termination of service.

Imposing termination protections on competitive suppliers also is inconsistent with the goals of competition in the electric industry. Competitive suppliers should be free to make business decisions regarding customers' inability to pay regardless of the reason for non-payment (presumably, they would terminate generation to such customers). Consumers in the competitive market will have the ability to protect themselves by changing suppliers; moreover, default service through the distribution company, to whom termination regulations do apply, will protect those who cannot obtain service in the competitive market. Default service also will protect elderly and low-income customers from termination of electric service. Moreover, in light of the fact that default service prices will be based on market prices, distribution companies will not be unfairly penalized by having to absorb the costs of these protections themselves. The Department therefore will not apply termination protection requirements to competitive suppliers.

Regarding dispute resolution, the Department intends to exempt competitive suppliers from the current adjudicatory process, except with regard to competitive suppliers who issue

¹⁰⁴ The customer, however, is likely to see a change in price as a result of being switched to default service.

bills.¹⁰⁵ First, many of the issues likely to come before the Department for resolution, such as complaints regarding improper termination, eligibility for termination protection (including establishing financial hardship where required), estimated bills, inaccurate meters, cross-metering and Sanitary Code violations, relate solely to distribution company functions. Allowing customers to bring complaints against competitive suppliers before the Department and to trigger the full panoply of rights associated with a G.L. c. 30A adjudicatory hearing runs counter to the Department's stated goal of reducing regulation of the electric industry and making the generation market competitive.

There will be adequate alternatives to bringing consumer complaints before the Department. For example, the state has a comprehensive statutory scheme for bringing consumer complaints in court under G.L. c. 93A.¹⁰⁶ In addition, the state facilitates dispute resolution via G.L. c. 7, § 51. Moreover, the Better Business Bureau ("BBB"), a nonprofit entity, counsels aggrieved consumers and offers mediation services. If the dispute cannot be resolved, the BBB counsels such customers to seek legal assistance or to bring a complaint in the district court. Further, the Attorney General's Consumer Protections Bureau undertakes investigations of certain types of consumer complaints, depending on factors such as the severity of the complaint,

¹⁰⁵ The Department intends to employ our current adjudicatory process for resolution of complaints regarding violations of competitive supplier requirements (see Section VII.B.7, above).

¹⁰⁶ G.L. c. 93A, § 3 provides that electric companies may be exempt from certain claims under § 93A by virtue of being regulated entities. See Lowell Gas Co. v. Attorney General, 377 Mass. 37 (1979); Dimarzo v. American Mutual Insurance Co., 389 Mass. 85 (1983). Legislative change may be necessary to clarify that competitive suppliers will be subject to such actions.

the number of similar complaints received and the existence of adequate staff resources at a given time. Therefore, customers obtaining generation from a competitive supplier will be able to avail themselves of existing state remedies for consumer complaints.

Massachusetts statutes, which were developed in the context of the regulated electric industry, do not provide a basis for regulating competitive suppliers. Section 25 applies to all jurisdictional electric companies. Competitive suppliers that are corporations under Massachusetts law¹⁰⁷ will meet the first definitional requirement of an electric company.¹⁰⁸ Competitive suppliers who make, *i.e.*, generate, and sell, their own electricity will meet the second part of the definition of an electric company. Arguably, however, competitive suppliers who are marketers, brokers or aggregators (*i.e.*, sellers of electricity only) do not fit into the current definition of an electric company. The Department believes it is critical to apply registration and consumer protection requirements to competitive suppliers beyond those enforceable under existing state and federal laws. In the absence of legislative changes to ensure the Department's jurisdiction over competitive suppliers, the Department may enforce compliance with our registration and other requirements for competitive suppliers by prohibiting distribution companies from doing business

¹⁰⁷ Out-of-state corporations doing business in the state of Massachusetts are subject to all state laws. G.L. c. 181, §§ 1, 3-4; 950 C.M.R. §§ 107.01 *et seq.*; see Pacific Wool Growers v. Commissioner of Corps. & Taxation, 305 Mass. 197 (1940).

¹⁰⁸ In G.L. c. 164, § 1, an electric company is defined as:

a corporation organized under the laws of the commonwealth for the purpose of making by means of water power, steam power or otherwise and selling, or distributing and selling, electricity within the commonwealth, or authorized by special act so to do, even though subsequently authorized to make or sell gas; provided, however, that electric company shall not mean an alternative energy producer.

with competitive suppliers not in good standing with the Department. However, such a remedy is appropriate only for very serious violations. The Department's registration requirements will be more meaningful if the Department has a range of sanctions available, such as the ability to impose fines. Therefore, the Department has proposed legislation giving us authority to impose the above non-price regulations on competitive suppliers.

SECTION VIII -- ENVIRONMENTAL ISSUES

One of the major challenges confronting the electric industry relates to the industry's significant environmental impacts and how those impacts may be affected by restructuring. Traditionally, environmental impacts have been addressed primarily through the actions of state and federal environmental regulators. Public utility commission regulation, however, has affected the industry's environmental impact. Many commenters fear that increased competition and reduced regulation will exacerbate the industry's environmental impact. Others are confident that restructuring will provide new opportunities to reduce the industry's environmental impact. Many commenters agreed that we have a legitimate role in ameliorating the environmental consequences of electric industry restructuring, and they offered several different proposals for doing so.

One of our goals in restructuring is to ensure that electric service is provided with minimum impact on the environment. Efficient competition in the electric industry should support and further the goals of environmental regulation. Similarly, environmental regulation should support efficient competition, for example, through comparable environmental standards for generators of different vintages.

In this section, we outline a strategy that relies on efficient competition, consumer choice, environmentally benign resource options, and coordination with other state and federal agencies to enhance the likelihood that restructuring will bring benefits to consumers and minimize adverse environmental impacts. We reaffirm our commitment to work with environmental regulators to encourage environmental comparability among generating resources in order to foster efficient competition and environmental improvement. Furthermore, consumer choice of electric service can provide a significant opportunity to reduce the environmental impact of the industry by allowing consumers to express directly their preference for energy efficiency and energy resources with relatively low environmental impact. It can only be an effective tool for environmental improvement, however, if sufficient information is available to consumers. We propose that the ISO collect real-time information on generating unit dispatch and emissions in order to inform consumer choice and to assist environmental regulators in achieving environmental improvement.

We seek the Legislature's endorsement of a coordinated approach between the Department and the Massachusetts Department of Environmental Protection. Where DEP does not have sufficient authority to implement the environmental policies it considers necessary and appropriate in a restructured industry, the Department will support DEP seeking necessary authority from the Legislature.

SECTION VIII -- ENVIRONMENTAL ISSUES

A. Introduction

The electric industry in Massachusetts and the United States has a major impact on environmental quality through power plant and transmission construction, operation, and decommissioning. In fact, by some measures, the industry's environmental impact is disproportionate to its economic impact. For example, while the electric power sector in Massachusetts represents approximately three percent of the state's gross domestic product, it accounts for between 25 and 60 percent of some of the state's most problematic air pollutants (see, e.g., Initial Joint Comments of DOER, EOE, CLF and UCS in D.P.U. 95-30, at 3). Changes in industry structure and regulation will influence the pattern of operation of existing resources as well as the selection, construction, and operation of new resources; and consequently they will affect the industry's future environmental impact.

In written comments, hearings at the Department, and public hearings, commenters have repeatedly stressed that the Department should continue to strive for minimum environmental impacts as the industry is restructured. Indeed, concern about the environmental impacts of the electric industry was one of the principal areas of public comment at each of the Department's eleven evening community meetings.

Comments regarding the environmental impacts of industry restructuring fall generally into two areas. Many commenters have expressed concerns that increased competition and reduced regulation will exacerbate the industry's environmental impact absent effective environmental safeguards. Others have expressed confidence that consumer choice and increased competition will provide new opportunities to reduce the industry's environmental impact.

In a competitive generation market, the differing price and environmental characteristics of various power sources will affect the way they compete directly to satisfy consumers' demand for electricity. For example, generating units that rely on different fuels have different emissions and different operating costs; new generating units are typically subject to more stringent environmental regulatory requirements than are old generating units; and generating units in Massachusetts are, in general, subject to more stringent environmental regulatory requirements than are competing generating units of comparable type in other regions of the country. Many commenters expressed fears that older generating units with relatively high emissions rates would have a competitive advantage due to their low costs. They suggested that, as a result, newer generating units with lower emissions rates but higher costs might operate less, and that future low-emissions resources might have difficulty entering the market. In addition, there is widespread concern in New England that the national trend towards greater competition and consumer choice might cause the Northeast to bear the brunt of increased emissions from low-cost, higher-emissions plants located in upwind regions, such as some parts of the Midwest. Because Massachusetts is currently not in compliance with federal regulations pertaining to ground level ozone, any increase in emissions from sources either inside or outside of the New England region, whether from changes in the industry structure or other causes, will increase the difficulty and cost of achieving compliance with existing environmental regulations.

While many commenters voiced concerns regarding industry restructuring and the environment, others expressed optimism that changes in the industry structure, combined with a greater emphasis on competitive forces, will offer new opportunities for innovative methods of minimizing environmental impact. For example, market-based mechanisms, such as emissions

cap and allowance trading programs, could be particularly well-suited to reducing the industry's environmental impact in a competitive generation market.¹⁰⁹ Furthermore, the introduction of retail access creates an opportunity to offer consumers the choice of selecting resources with low environmental impact.

The Department consistently has sought to explore and address issues pertaining to the environmental impacts of electric industry restructuring. We have discussed previously the distinct roles of environmental and economic regulators. Environmental regulation, with limited exceptions, is the province of environmental regulatory agencies such as the U.S. Environmental Protection Agency ("EPA") and the Massachusetts Department of Environmental Protection ("DEP").

The environmental regulators' task is to set standards that, allowing an adequate margin of safety, are requisite to protect the public health and welfare.... With respect to environmental impacts, economic regulators have first and foremost ensured that electric companies minimize costs to comply with current environmental regulations and minimize long-term costs to consumers by anticipating the impacts of potential future requirements. Economic regulators have also implemented policies that encourage resource selection decisions that favor less polluting generating resources, all else being equal. The task of economic regulators has not been to determine and hold utilities to environmental standards different from or more stringent than those imposed by environmental regulators.

D.P.U. 95-30, at 25-26.

¹⁰⁹

In a cap and allowance trading program, a limit is placed on overall emissions of a particular pollutant, and individual generating units are allotted an emissions budget within that overall limit. Individual generating units can design a cost-effective strategy for staying within their budget using actual emissions reductions and/or purchasing emissions reductions from another source that can reduce emissions more cost-effectively. Such a program encourages market participants to identify where the largest emissions reductions can be achieved on the most cost-effective basis, and requires those participants who cannot achieve cost-effective reductions to internalize the costs of the pollutants they emit through the purchase of allowances where necessary to stay within their emissions budget.

The Supreme Judicial Court ("SJC") defined the appropriate scope of the Department's authority over environmental matters in Massachusetts Electric Company v. Department of Public Utilities, 419 Mass. 239 (1994). The SJC determined that as a ratesetting agency, the Department's authority to regulate environmental impacts is limited to the costs to ratepayers associated with those impacts; but that the legislature and agencies to which such authority is delegated, such as environmental agencies, have the authority to protect the environment.

The Department will take those steps within its authority to ensure that restructuring does not exacerbate the impact of the industry on the environment. We have concluded that the best way to ameliorate the industry's environmental impact while lowering costs to consumers is through closer coordination among economic and environmental regulators. In D.P.U. 95-30, the Department stated that electric service should be provided with minimum impact on the environment, and that increased competition in the electric industry should support and further the goals of environmental regulation. D.P.U. 95-30, at 13, 25-27. As an economic regulatory agency, the Department can assist environmental regulators by establishing an industry structure that facilitates the achievement of environmental improvement.

Proper application of the principle of ensuring full and fair competition among resources should assist in the achievement of both economic and environmental goals. In D.P.U. 95-30, at 27, we stated that, in order to foster full and fair competition, all generation regardless of vintage should over time be subject to equivalent levels of environmental regulation ("environmental comparability").¹¹⁰ In addition, we requested comments on what role the

¹¹⁰ The application of equivalent environmental controls on generating units without regard to plant vintage but with due allowance for different fuels and technologies is often

Department should play in supporting environmental regulators if they were to require older units operating past their original retirement date to meet more stringent environmental standards.

May 1 Statement at 35-38. We also stated that we expect that generators will anticipate and minimize environmental compliance costs as they seek to become and remain competitive.

D.P.U. 95-30, at 26; May 1 Statement at 38. We recognized a compelling need for coordination between economic and environmental regulators at the state and federal levels, and promised to take steps within our jurisdiction to secure continued progress toward cost-effective achievement of environmental quality goals. May 1 Statement at 35-37.

B. Issues Raised

Comments on the environmental impacts of electric industry restructuring addressed the Department's role in addressing environmental impacts, environmental comparability requirements, regulatory mechanisms for selecting resources according to their environmental impact, and coordination among economic and environmental regulators in gathering emissions information.

In response to the May 1 Statement and to questions during hearings, several commenters stated that the Department clearly has a role in minimizing the potential environmental consequences of electric industry restructuring. Commenters suggested that this role is founded primarily on the Department's obligation to reduce costs to ratepayers (Attorney General August 2, 1996 Comments at 16; CLF August 5, 1996 Comments at 5-7; CPC August 2, 1996 Comments at 20; DOER August 2, 1996 Comments at 16-17).

referred to as "environmental comparability."

Some commenters stated that environmental comparability between old and new generating units is a necessary component of an efficient generation market that would lower costs to customers in the long run (CLF August 5, 1996 Comments at 5-6; CPC August 2, 1996 Comments at 21; IEC August 2, 1996 Comments at 10). They stated that, without environmental comparability, newer electricity generators that have borne higher capital and/or operating costs to achieve relatively low emissions rates would not be able to compete effectively with older electricity generators, resulting in higher emissions and higher costs to consumers because of inefficient competition (CLF August 5, 1996 Comments at 5-6; IEC August 2, 1996 Comments at 10-12; CPC May 24, 1996 Comments at 40-41). Accordingly, commenters suggested that the Department include incentives for environmental comparability in its stranded cost policies by granting owners of generating units an extended stranded cost recovery period in exchange for an obligation to meet stricter environmental standards at existing units (CPC August 2, 1996 Comments at 18; IEC August 2, 1996 Comments at 13; DOER August 2, 1996 Comments at 17; Tr. 10, at 26-27). IEC also suggested that the Department should not apply the used-and-useful principle to recovery of stranded costs associated with power plants that are shut down as a result of prudent business decisions and environmental considerations (IEC August 2, 1996 Comments at 14).¹¹¹

¹¹¹ IEC argued that operation of a generating unit (ostensibly making the unit "used and useful") should not be a prerequisite to collecting stranded costs associated with the unit. Such a requirement, it claimed, could result in the operation of high-emission units "solely in order to collect stranded costs associated with the facility" or to demonstrate that stranded costs are being mitigated (IEC May 24, 1996 Comments at 12).

Two commenters proposed mechanisms for requiring that environmental considerations be included in the selection of generation resources. The Attorney General suggested that the Department protect ratepayers from any costs that generators might incur in the future to comply with environmental regulations by providing incentives to distribution companies or to retail customers signing bilateral agreements to purchase power from low emissions resources (Attorney General August 2, 1996 Comments at 16-17). The incentive would be a positive or negative adjustment to a distribution company's access charge that would be based on the emissions characteristics of an individual generating unit or mix of generating units (id. at 18-19). In the other proposal, the Grand Council of the Crees urged the Department to judge imported electricity on environmental impact and on the impact on societies depending on the natural environment for subsistence (Grand Council of the Crees July 30, 1996 Comments at 2, 5-6). The Grand Council of the Crees suggested particular criteria for the Department to use in evaluating a resource's environmental impact (id. at 5).

Yet another proposal focused on gathering more complete and timely information on environmental emissions, and closer coordination between environmental and economic regulators. The DEP stated that the collection of real-time information on the operation of the bulk power system could be combined with plant emissions information already available to environmental regulators. The ability to track emissions levels on more of a real-time basis, DEP contended, would be very useful to environmental regulators seeking to ensure that health-based environmental standards are met (Tr. 10, at 118-119, 125). The DEP also suggested that the ISO should consider environmental factors along with cost, safety, and reliability in deciding which generating units to dispatch (Tr. 10, at 27-28).

Finally, CLF stated that the Department is compelled under the Massachusetts Environmental Protection Act ("MEPA") to consider, and adopt where necessary, environmental measures such as comparability, even if such measures were not founded in market structure concerns, as CLF contended they are (CLF August 5, 1996 Comments at 7). CLF stated that it plans to refer the Department's final restructuring rules or implementing dockets for MEPA review if they do not include policies such as environmental comparability (*id.* at 8).

C. Current Department Proposal

No single policy or regulatory agency can dispel all concerns over, or fully address the possible ramifications of, the environmental impacts of restructuring the electric industry. An appropriate and effective response will require coordinated efforts among environmental and utility regulators at the federal and state levels, and will encompass regulatory efforts and market forces so that both economic and environmental goals can be achieved. The Department reaffirms its intention to ensure that, at a minimum, restructuring will not interfere with the task of improving environmental quality. In fact, the Department will take several steps that, in combination with other efforts, should advance environmental protection. We have introduced many of the elements of our proposed industry structure, such as the establishment of an ISO and rules of conduct for suppliers, with the objective of fostering full and fair competition among sources of generation. In addition, we reaffirm our view that, in order for competition to be full and fair, generating units should be brought under equivalent environmental controls without regard to plant vintage.

Environmental regulators are considering comparability standards and are incorporating market-based mechanisms in their regulations. For example, the DEP has recently proposed rules

that would implement the nitrogen oxides ("NO_x") emissions cap and allowance trading program as outlined in the Ozone Transport Commission ("OTC") Memorandum of Understanding ("MOU") (September 1994).¹¹² The NO_x cap and allowance trading program should result in cost-effective overall NO_x emissions reductions in the electric generating sector through a market-based mechanism. The Department applauds the DEP and the OTC for designing a program that moves toward treating all resources comparably, and that should prevent the availability of NO_x allowances from becoming a barrier to entry in the generation market.¹¹³

Clearly, the environmental impact of the electric industry is determined in large part by the nature of the portfolio of generating units that are constructed and operated. In a competitive generation market, consumer choice rather than economic regulatory policy will drive the composition of this portfolio. As the Department has emphasized throughout this proceeding, consumer choice is the linchpin of effective competition. See, e.g., D.P.U. 95-30, at 13.

There are two primary ways in which consumer choice will shape the portfolio of resources. First, in the short run, it is possible that consumer choice might influence the dispatch order of the mix of available resources. Second, in the long run, consumer choice in conjunction with environmental regulation could affect generating unit investment and retirement decisions,

¹¹² The OTC MOU was signed by eleven states, including Massachusetts, and the District of Columbia. The MOU calls for NO_x emissions from sources such as electric generating units and boilers in the Ozone Transport Region to be reduced by 2003.

¹¹³ The DEP has also proposed a "ticket to play" policy that requires any generator wishing to sell electricity in Massachusetts to meet a generating performance standard before it can sell in the state (November 20, 1996 Speech of DEP Commissioner Struhs to NARUC).

thus determining the mix of resources available to be dispatched. The Department's proposed renewables fund (discussed in Section IX) will provide an important additional opportunity for consumers to influence the environmental characteristics of the generating resource mix, by introducing resources that would not otherwise be competitive into the generation mix.

Furthermore, customers will be able to reduce the amount of electricity they consume, and consequently environmental impacts, through the installation of energy efficiency measures.

Consumer access to information about available products and services is a crucial element in effective competition. To support consumers' ability to make informed decisions, the Department intends to require that when suppliers register, they provide information on the sources and environmental impacts of power that they propose to sell to consumers in Massachusetts (see Section VII). Subsequently, all suppliers will be required to report information related to the fuel sources and emissions characteristics of their supplies on a portfolio-wide basis, quarterly. This information will be particularly useful to consumers who seek to purchase electricity from low-emission generating sources.

The Department considers the ability to choose electric resources and services with verifiably low environmental impact to be a very important element of consumer choice in a restructured industry. The issue is whether sufficient information can be provided to customers on bills and in marketing materials to identify accurately the resource mix of suppliers and to make verifiable claims that power is generated from resources with relatively low environmental impact. To date, no method has been identified to verify environment-related marketing

claims.¹¹⁴ Verification would be complicated by the task of determining the difference in dispatch of resources in the region, over time periods as short as a day, that results from the marketing activity of a given supplier. Despite practical problems in verification, the Department is convinced that, at a minimum, estimation and collection of emissions information as a function of system dispatch will be necessary to inform consumer choice and to validate environment-related marketing claims.

The collection of real-time emissions information as a function of dispatch would also be useful in environmental regulators' efforts to monitor air quality within the region and to achieve environmental improvement (Tr. 10, at 118-119). In addition, aggregation of such information could greatly facilitate product labeling and the publication of summary data for existing regulatory filings, and could assist in monitoring compliance with market-based environmental regulations such as cap and trade programs.

The ISO appears to be the most obvious and appropriate entity for gathering and reporting real-time emissions information associated with generating unit dispatch. The EPA has alerted the FERC that, in its efforts to comply with its obligations under the Clean Air Act and its amendments, it "intends to draw on available information from [the United States Department of Energy ('DOE')] and [the] FERC to establish a tracking system combining available information on emissions, capacity utilization, wholesale electricity sales, and other factors" (May 13, 1996 Letter of Carol M. Browner to Kathleen A. McGinty referring the FERC's Open Access

¹¹⁴ Some have recommended that suppliers be required to report basic fuel source data for each generation facility to the ISO and that the ISO make available a report on electricity production by each facility (Regulatory Assistance Project Issue letter, October 1996).

Rule to the Council on Environmental Quality ("CEQ")).¹¹⁵ Details regarding the content and format of information that would be useful to environmental regulators must be developed through coordination among the FERC, the DOE, the EPA, and state environmental agencies. In Section VII we discuss a Department proposal to require information to substantiate environmental marketing claims. Here we recommend that FERC require the ISO to collect and report real-time emissions information as a function of generating unit dispatch.

Several commenters suggested that the Department provide incentives for environmental comparability by granting owners of generating units an extended stranded cost recovery period in exchange for an obligation to meet stricter environmental standards at existing generating units. Although such a proposal may have merit, it would be effective only if the Department were to retain its proposed ten-year limit on stranded cost recovery. However, our current stranded cost recovery policy, as revised through this rulemaking process, no longer requires collection of stranded costs for generating units in ten years (see Section XI). Therefore, it would not be meaningful to offer an additional two years for recovery as an incentive to bring older resources into compliance with current environmental standards. Moreover, we are not in a position to establish or enforce environmental comparability standards. However, we do support DEP's pursuit of such policies.

The Department supports the development of market-based mechanisms through which emissions from the electricity sector are regulated in the aggregate rather than on an individual

¹¹⁵ The DOE has offered active support for tracking emissions attributable to the open access transmission rule, FERC Order 888 (June 3, 1996 Letter from Hazel O'Leary, Secretary of Energy, to Kathleen McGinty, Chair, CEQ).

unit basis. In addition, we fully expect that existing regulations, or even more stringent regulations, will continue to be applied to sources of generation through environmental permitting processes. In fact, the EPA has recently proposed a more stringent air quality standard for ground level ozone and a new standard for fine particulate matter. See "National Ambient Air Quality Standards for Particulate Matter; proposed rule," 61 Federal Register 65,638; and "National Ambient Air Quality Standards for Ozone; proposed rule," 61 Federal Register 65,716. However, once the competitive generation market is established, we do not anticipate that we will restrict the resources available to consumers based on environmental impact.¹¹⁶ Rather, environmental regulation and the exercise of consumer choice will determine what resources compete in the generation market in Massachusetts. Thus, the Grand Council of the Crees' proposal for the Department to develop criteria for evaluating imported power is not consistent with our vision of a competitive market for generation.

The Attorney General proposes to provide incentives for the selection of low-emission resources or portfolios of resources in order to protect ratepayers from environmental compliance costs. However, in a more competitive generation market, consumers can avoid increased environmental compliance costs through choice. The Department expects generators to anticipate and minimize environmental compliance costs as they seek to become and remain competitive. If a supplier cannot charge prices in the competitive generation market sufficient to recover the full costs, including environmental compliance costs, of a given resource, the supplier will not continue indefinitely to offer the resource in the marketplace. Thus consumers will not

¹¹⁶ The Energy Facilities Siting Board will continue to evaluate the environmental impact of new resources in its decisions.

be forced to pay compliance costs where there is a more economic alternative. The Department has stated, and reaffirms here, that no costs incurred after August 16, 1995, including environmental compliance costs, will be considered stranded costs. See D.P.U. 95-30, at 32; May 1 Statement at 38.

Beyond the Department's actions and coordination among agencies with jurisdiction in Massachusetts, there will be a continuing need to address many environmental issues on a regional basis. One area, for example, where regional coordination is necessary is in addressing disparities in environmental regulations applied to generating units within New England as well as outside the region. We will continue to participate in regional efforts to evaluate and ameliorate the regional environmental impacts of electric industry restructuring.¹¹⁷ We will also monitor the progress of the Ozone Transport Assessment Group ("OTAG"), which has been convened to address interstate pollutant transport issues, and will take appropriate steps to support that effort. We will pursue the necessary and appropriate measures within our jurisdiction to coordinate restructuring activities with the regulatory efforts of environmental regulators.¹¹⁸

CLF has stated that, if the Department's restructuring rules do not include policies such as environmental comparability, it will request a review of the rules under MEPA. Throughout

¹¹⁷ The Department has already joined with other New England PUCs in offering comments to the FERC on the environmental impacts of the FERC's Open Access policy, FERC Order 888 (New England States' comments on the FERC's Draft Environmental Impact Statement, January 31, 1996).

¹¹⁸ Similarly, at the Federal level FERC has stated that, if EPA concludes that the OTAG process is not successful, it would investigate what actions it may take under the Federal Power Act to address air pollution impacts attributable to FERC Order 888. Order Responding to Referral to Council on Environmental Quality, Docket Nos. RM95-8-000 and RM94-7-001, at 8-9.

our restructuring efforts, we have placed a strong emphasis on environmental issues. As a result, this proposal embodies many elements which in combination will serve to minimize the impact of electric restructuring on the environment. However, just as the Department cannot single-handedly restructure the electric industry, the Department cannot on its own avert all potential environmental impacts of restructuring. We have identified the components of a strategy to minimize the environmental impacts of restructuring, and have discussed policies through which restructuring can lead to environmental gains; but an effective strategy will require coordination across jurisdictional boundaries. The Department's proposal will continue to evolve as we work with the Legislature. We plan to proceed within our statutory authority to take actions within our jurisdiction, such as enhancing informed consumer choice; and we will continue to support actions that environmental regulators take within their jurisdiction. Where DEP does not have sufficient authority to address environmental concerns arising from restructuring, the Department will support their seeking necessary authority.

We will continue to evaluate how restructuring the electric industry affects the industry's environmental impact; and we will address the issue of MEPA review at the appropriate time.¹¹⁹ We look forward to working with other governmental agencies as well as environmental groups and other affected entities to ensure that restructuring proceeds with a minimum impact on the environment, and that opportunities are enhanced for using competitive forces and consumer choice to achieve environmental improvement.

¹¹⁹ See, e.g., June 23, 1995 Letter from Jan H. Reitsma, Assistant Secretary Environmental Impact Review, to Armond Cohen of CLF).

SECTION IX -- ALTERNATIVE ENERGY RESOURCES

One of the challenges facing the Department in the restructuring process is how to ensure that energy efficiency and technologies based on alternative fuels have an opportunity to compete with other supply resources. The Department sees a role for alternative energy resources in three areas: (1) renewable energy, (2) energy efficiency or conservation, and (3) distributed generation, i.e., small-scale generation strategically located on the distribution system in constrained areas. Effective use of these resources can help lower consumers' electric bills; create more choices for consumers; reduce the environmental impact of providing electric service; contribute to overall system reliability; increase resource diversity; and further important Department, state, and national energy goals.

The restructuring of the electric industry may hinder the development of renewable and other emerging energy technologies because the emphasis on price in a competitive market can work to the disadvantage of technologies that are not yet mature. Our Model Rules create increased opportunities for renewable and emerging technologies by establishing (1) a fund to promote the development of renewable energy, (2) fair and reasonable interconnection standards for renewable energy producers, and (3) requirements for distribution companies to provide information on renewable technologies to their customers.

While we believe that a competitive market will lower many market barriers, we believe that continuation of some level of support for energy efficiency, or conservation, is necessary for two reasons. First, certain market barriers, such as the inability of low-income customers to purchase energy efficiency measures, the differing motivations of landlords and tenants, and the lack of financing options available to the average consumer, are likely to continue in a competitive marketplace. Second, regulatory support is necessary and desirable to ensure that the energy efficiency industry is prepared to compete in the restructured generation marketplace. Therefore, we will require distribution companies to file energy efficiency plans to be implemented concurrently with the introduction of retail choice.

Distributed generation is an alternative energy option that can reduce distribution costs and increase system reliability. Distributed generating facilities can provide economic and environmental benefits to all customers. Therefore, to maximize cost-effective opportunities for distributed generation, we plan to continue our policy of net metering or billing, allowing small-scale customer-owned generators, including but not limited to renewable energy and cogeneration facilities, to run their meters backward when they produce more energy than they use. These facilities

shall receive the average market clearing price for generation for positive net differences between generation and consumption during any monthly period.

SECTION IX -- ALTERNATIVE ENERGY RESOURCES

A. Introduction

There is widespread concern that competition in the generation market will lead to a lack of diversity in fuels and technology and environmental degradation, and stifle opportunities for emerging technologies. For this reason the Department believes it is necessary and appropriate to provide modest but assured support for alternative energy resources. We see a role for alternative energy resources in the restructured industry in three areas: (1) renewable energy, (2) energy efficiency or conservation, and (3) distributed generation. Effective use of these resources can help lower consumers' electric bills; create more options for consumers; reduce the environmental impact of providing electric service; contribute to overall system reliability; increase resource diversity; and further important Department, state, and national energy goals. In this section, we address renewable energy, energy efficiency, and distributed generation, and propose specific mechanisms to continue support for alternative resources.

B. Renewable Energy Resources1. Introduction

Increased use of clean, renewable energy resources ("renewables")¹²⁰ to generate electricity is one way to ensure that restructuring furthers the goal of environmental improvement. We reaffirm our commitment to ensuring that renewables and other emerging technologies have a

¹²⁰ For purposes of this rulemaking, the Department is defining renewables as those renewable energy sources and emerging technologies that are relatively immature but have significant potential in New England, including solar and wind power projects, fuel cells and biomass (limited to dedicated fuel stock cultivation, except wood). The Department includes fuel cells in its definition of emerging technologies that should be supported because, although fuel cells are not a renewable energy technology, they are relatively immature but have significant potential for large, cost-effective emissions reductions in New England. This definition is subject to revision as new technologies are developed.

meaningful opportunity to compete in the future competitive market for electricity and energy services in order to offer more options for consumers, contribute to overall system reliability, and increase the diversity of the resource base. May 1 Statement at 68. Commenters noted that the use of renewable resources also contributes the following benefits: improving national energy security by decreasing reliance on foreign fuels; improving public health by reducing the number of pollutants entering the environment; reducing health and life insurance costs as a result of the overall improvements to public health; reducing the release of fossil-fuel-related carbon dioxide ("CO₂") into the atmosphere, thus mitigating a factor that has been cited by many authorities as a threat to the future of the global ecosystem and agricultural enterprise; and enabling energy producers to avoid the high costs associated with non-compliance fines, environmental cleanup, and taxes on emissions, by shifting production to sources that are less harmful to the environment. See, e.g., UCS May 24, 1996 Comments at 2-3; "Promoting Environmental Quality in a Restructured Electric Industry," prepared for NARUC by the Tellus Institute, December 15, 1995, at 7-8.

In addition to the broad policy reasons outlined above, some degree of support for renewables in Massachusetts makes economic sense. During proceedings, commenters presented information to the Department showing that the value of photovoltaics per kilowatt in Massachusetts is the fifth highest in the country (Evergreen Solar, Inc. August 2, 1996 Comments at 1 and Attachment 1; UCS August 2, 1996 Comments at 6). This value is due in large part to the correlation between solar output and daily load patterns in Massachusetts, as well as to the high cost of electricity here. These commenters stated that, contrary to popular belief, research shows that photovoltaics are currently more economic in Massachusetts than in the sunnier states

of New Mexico, Texas, Nevada, Utah, and Florida (Evergreen Solar, Inc. August 2, 1996 Comments at 1 and Attachment 1; UCS August 2, 1996 Comments at 6). Evergreen Solar, Inc. noted that Massachusetts also boasts a rich knowledge and technology base for renewables, possessing a strong entrepreneurial business culture that creates a positive climate for the development of new renewable energy enterprises. Evergreen Solar, Inc. states that it is located in Massachusetts because of the Commonwealth's high-tech labor force, supportive legislative infrastructure, and availability of venture capital (Evergreen Solar, Inc. August 2, 1996 Comments at 1). While we emphasize that our support for renewables rests upon considerations of ratepayer interest, we note that supporting Massachusetts' renewables industry can provide ancillary benefits such as increasing the number and diversity of products exported from the state, as well as jobs and revenue in Massachusetts. Providing opportunities for the renewable energy industry therefore promotes economic development in Massachusetts.

Renewables may be relatively more prone to market failure than conventional generating technologies during the transition to a competitive industry and under the new competitive structure, because they must overcome certain market barriers not facing traditional energy sources. Renewable energy resources are usually capital-intensive, with higher initial investments and longer payback periods than traditional energy sources.¹²¹ Renewables also face several other market barriers including (1) inadequate information regarding renewables and emerging technologies available to consumers; (2) high marketing and advertising costs, due in large part to

¹²¹ Although renewable technologies typically have high initial capital costs, they are characterized by relatively low and stable operating costs, since they are not susceptible to the fluctuation of fuel prices.

the current lack of consumer awareness; (3) concern that individual consumers might be unwilling to pay for renewables when the benefits from reduced emissions are shared equally by everyone, regardless of who pays; and (4) buyers' and sellers' lack of experience with these technologies.¹²²

Therefore, in order to help renewable energy providers overcome market barriers and ensure that renewables have a meaningful opportunity to compete in the future electric generation market, the Department proposed in its May 1 Statement at 69 to establish (1) a fund to support renewable energy providers ("renewables fund"), (2) fair and reasonable interconnection standards for renewable energy producers, and (3) requirements for distribution companies to share information on renewable technologies with their customers.

The Department proposed that the renewables fund be collected by distribution companies via a non-bypassable access charge and distributed to suppliers of renewable energy to offset some of the difference between the price of power from renewable energy technologies and the price that consumers may be willing to pay for power from renewables.

May 1 Statement at 69. The Department sought comment on several issues related to the renewables fund, as well as other issues regarding the commercialization of renewables in general.

¹²² UCS pointed out that all energy sources are the subject of government policies whose implementation costs are not internalized in market prices for fuel. Thus, for example, fossil-fuel and nuclear energy sources are implicitly subsidized at levels greater than are renewables and other alternative energy resources (D.P.U. 95-30, UCS March 31, 1995 Comments at 5).

2. Issues Raised/Current Department Proposals

Many commenters endorsed our making explicit provision to assure the continued development and commercialization of renewables (BFI May 24, 1996 Comments at 15-16; MECo May 24, 1996 Comments at 54; CPC May 24, 1996 Comments at 42-43; Tr. 11, at 3-25). Commenters addressed the establishment of a quantitative goal for Massachusetts' level of renewables production; the appropriate level of the renewables fund charge; the administration, disbursement, and possible uses for the fund; the option of a renewables portfolio standard; the importance of providing consumers with adequate information about renewables; and the need to establish fair interconnection standards for renewable energy producers.

a. Level of Renewables Production

A number of commenters supported the establishment of a goal for the level of renewables production to be achieved by a date certain (UCS May 24, 1996 Comments at 9; Tr. 11, at 63-77). Western Massachusetts Electric Company Industrial Customer Group ("WMECICG") stated that, unless the Department enunciates a specific goal for the level of renewables production to be supported by the renewables fund, there is no way to measure the fund's effectiveness (Tr. 11, at 75). UCS proposed that, to contribute meaningfully to the sustained development and commercialization of renewables on a national level, New England would need to add new renewables equal to 4 percent of total system sales over the next ten years (UCS May 24, 1996 Comments at 9). UCS also asserted that a charge of one to two mills per kilowatthour ("KWH") is likely to be sufficient to accomplish that objective (*id.*).

The Department declines to commit to a goal for a specific level of renewables production at this time. Instead, we reaffirm the approach taken in our May 1 Statement, that a

low, non-bypassable charge would foster competition and provide a market-based incentive to explore the viability of renewables. May 1 Statement at 68. However, we believe that, along with initiatives being undertaken by other jurisdictions in New England, our proposed level of renewables funding should be sufficient to stimulate the market for renewables. The Department can use a 4 percent addition of renewable energy to regional system sales of electricity over the next ten years as a benchmark to evaluate the efficacy of our proposed approach to the sustained development and commercialization of renewables, as well as the level of funding necessary.

b. Renewables Fund Charge

There was some disagreement among commenters over the issue of funding renewables through ratepayer contributions, and WMECo suggested instead that funding for renewables be accomplished through a tax (WMECo May 24, 1996 Comments at 41; Tr. 11, at 23-26). However, because the development of renewable energy resources is directly related to the provision of electricity (particularly with respect to expanding consumers' choices) and because those who benefit will be consumers of electricity, the Department finds it appropriate to provide for the funding of renewables through electric rates.

With one exception,¹²³ commenters who addressed the level of renewables funding supported a charge of one to two mills per KWH (Second Wind, Inc. May 24, 1996 Comments at 3; Solar Design Associates May 24, 1996 Comments; Jerrold Oppenheim May 24, 1996

¹²³ WMECICG asserted that a charge of 0.12 mills per KWH would be adequate, providing for the addition of renewables equal to 1 percent of existing capacity (WMECICG May 24, 1996 Comments at 35). However, in hearings, WMECICG stated that its primary concern is for meaningful rate relief and that, if the Department did not allow stranded cost recovery, 2.0 mills per KWH would be an acceptable charge for the renewables fund (Tr. 11, at 77).

Comments at 12; UCS May 24, 1996 Comments at 9; Tr. 11, at 7-21). The Department proposes in our Model Rules to set the charge at a level of one mill per KWH, beginning January 1, 1998, to be collected on every KWH sold in Massachusetts through a non-bypassable access charge. This funding mechanism is consistent with the Department's statutory authority to set just and reasonable rates. G.L. c. 164, § 94. Monies collected through the fund will then be distributed directly to eligible producers of renewable energy so that they can reduce the price they charge consumers while remaining commercially viable. After three years of implementation, the Department will review the results achieved and will reevaluate the need for and appropriate level of funding to support the commercialization of renewables.

c. Administration and Disbursement of the Renewables Fund

The Department has received and reviewed various suggestions for choosing a fund administrator, but at this time does not have sufficient information to choose the most suitable entity to administer the fund. The Department has also examined various options regarding disbursement of the fund, such as using a bid-based system, evaluating requests for funding on a case-by-case basis, offering funds on a first-come, first-served basis, or establishing a cap on providing funding to any single technology or producer (Second Wind, Inc. May 24, 1996 Comments at 2; Jerrold Oppenheim May 24, 1996 Comments at 13; UCS August 2, 1996 Comments at 9). The purpose of a cap on funding would be to ensure that the fund supports a diverse set of technologies.¹²⁴

¹²⁴ In general, the Department supports a limit on the amount of funding any one technology or producer could receive as a means to further advance the Department's commitment to customer choice and resource diversity.

To evaluate more fully the issues related to the selection of a fund administrator and fund disbursement decisions, including establishing caps on funding, the Department invites interested stakeholders to form a renewables collaborative. The collaborative should examine these issues and present recommendations to the Department by July 1, 1997 for review and implementation by January 1, 1998. The Department will review any other suggestions made by the collaborative related to the renewables fund, but we ask the members of the collaborative to limit their initial discussions to these issues so that monies from the renewables fund can be available to developers upon the initiation of retail choice in Massachusetts.

The Department has examined suggestions to use the renewables fund not only to offset the high price of renewables, but also to support pilot projects and other initiatives whose goal is to remove the market barriers facing producers of renewable energy (CLF May 24, 1996 Comments at 15; DOER May 24, 1996 Comments at 37-42). It continues to be our view that the most efficient use of the fund is to reduce the price of renewables, which will, in turn, enhance the ability of renewable energy producers to overcome the non-price barriers they face and pursue increased production opportunities. Therefore, at this time, we do not intend to sanction use of the renewables fund to support pilot projects or any other initiatives not consistent with our Model Rules.

d. Renewables Portfolio Standard Option

As an alternative or in addition to the renewables fund approach, some commenters suggested that we should adopt a renewables portfolio standard, i.e., require that all suppliers in Massachusetts include at least a minimum percentage of renewable energy in their resource portfolio (UCS May 24, 1996 Comments at 2-5; UCS August 2, 1996 Comments at 10; Jerrold

Oppenheim May 24, 1996 Comments at 13; Integrated Waste Services Association ("IWSA") May 24, 1996 Comments at 1-3 and Attachment).

We believe that the renewables fund approach will have the same effect, without the administrative complexity, as the renewables portfolio standard approach. The renewables fund approach will not require the Department to monitor the resource mix of every supplier or to establish and monitor a cap-and-trade allowance system. It will be more market-oriented, require less regulatory intervention, and provide suppliers and consumers with more flexibility of choice. Accordingly, we will not establish a renewables portfolio standard for Massachusetts at this time.¹²⁵

e. Consumer Information and Interconnection Standards

Renewables face certain non-price barriers to competition, including a lack of familiarity with renewable technologies on the part of consumers and suppliers. In order to address this lack, the Department proposes to impose on the distribution companies certain requirements regarding disclosure of information concerning renewable energy technologies. Specifically, our Model Rules will require distribution companies to make any and all non-proprietary information that they have obtained on renewable energy technologies available to their customers.

The Department also believes that it is important to establish fair and reasonable interconnection standards for renewable energy producers. Renewable energy providers should

¹²⁵ Competitive suppliers may be eager to offer "green" options to consumers. To enable consumers to make informed decisions about these options, the Department will require suppliers, including the distribution companies for their options of standard offer and default service, to disclose certain information pertaining to all generating sources of power, including those being marketed as "green" (see Section VII).

have the same level of access to the distribution system as providers of traditional energy resources, so that they may have the ability to sell power into the regional energy market, directly to customers, or to other competitive suppliers.

C. Energy Efficiency

1. Introduction

The Department has historically maintained policies to ensure ratepayer support of cost-effective electric company-sponsored energy efficiency efforts. Promotion of end-user energy efficiency has been one way for the Department to ensure that electric companies provide safe, reliable, low-cost, clean power. We have recognized the potential of energy efficiency to lower rates where energy efficiency is a least-cost alternative to supply resources. Integrated Resource Management, D.P.U. 89-239 (1990); 220 C.M.R. §§ 10.00 et seq. Furthermore, energy efficiency provides customers with more choices in energy alternatives and cost-saving measures.

The Department has also recognized that, within the traditional monopoly regulatory structure, electric companies have been in a unique position to promote energy efficiency because of each electric company's exclusive relationship to its customers. Therefore, we have encouraged electric company-sponsored energy efficiency through a variety of mechanisms, including financial incentives and rules governing procurement of resources. 220 C.M.R. §§ 10.00 et seq.; Massachusetts Electric Company, D.P.U. 89-194/195, at 176 (1990). We note that several Massachusetts electric companies have been recognized nationally for their successful energy efficiency programs, and that thousands of consumers have taken advantage of energy efficiency measures that have lowered their energy costs and made their homes, businesses, and institutions more energy efficient. As indicated by the annual reports on DSM filed by all

investor-owned electric companies in Massachusetts, between 1989 and the end of 1996, Massachusetts will have saved approximately 11,000 gigawatthours of energy through existing energy efficiency programs. In 1995 alone, Massachusetts saved just under 2,000 gigawatthours of energy, which is enough energy to power a city about the size of Worcester for a year. Furthermore, utility-sponsored programs have contributed significantly to the strong energy service company industry that exists in Massachusetts.¹²⁶

The Department's support of energy efficiency has evolved and continues to evolve with the changing nature of the electric industry. We expect that new opportunities for energy efficiency will arise in a restructured market, and that new energy efficiency strategies will become cost-effective.¹²⁷ In the May 1 Statement at 64, we stated our expectation that, in a fully competitive generation environment, energy efficiency services should be provided by the market, and that any sector of this market that is sufficiently competitive should not require regulatory intervention. We recognized, however, that there are two reasons to continue some level of oversight of these services, even in a market environment. Id. at 64-65.

First, the Department stated that some of the market barriers that currently exist for these services are likely to continue even after a competitive market has developed,¹²⁸ and that

¹²⁶ The energy efficiency service industry in Massachusetts has developed into an export industry, the benefits of which accrue to the Commonwealth's economy directly, and to electric company customers indirectly.

¹²⁷ The Department is using "cost-effective" in this context in its ordinary economic meaning, not as a term of art related to evaluation of the costs and benefits of electric company-sponsored DSM programs.

¹²⁸ The Department gave examples of existing market barriers, such as customers' lack of information about energy efficiency, lack of financing options, the inability of low-income (continued...)

continued regulatory support is one method of mitigating the effect of these barriers. Id. at 65.

The Department also noted the market barriers that specifically affect low-income customers, preventing them from purchasing energy efficiency services and continuing the inefficiencies of low-income housing stock.¹²⁹ Id. at 65 n.43. Second, we stated that it is in the public interest for the Department to continue to support and encourage the development of the energy efficiency industry in Massachusetts. Id. We noted that energy efficiency provides the opportunity for consumers to lower their electric bills, enhances customer choice, lowers the environmental impact of providing electric service, and furthers important Department, state, and national energy objectives.¹³⁰ Id. at 65-66.

In the May 1 Statement, we indicated that our proposed rules regarding energy efficiency would implement a gradual shift toward energy efficiency services that compete effectively in the open market. Id. at 66. We proposed that distribution companies file five-year plans to provide energy efficiency ("energy efficiency plan") that include a transition from traditional DSM retrofit

¹²⁸(...continued)

customers to purchase energy efficiency measures, and the differing motivations of landlords and tenants. May 1 Statement at 65.

¹²⁹ In the May 1 Statement, the Department invited comments on whether energy efficiency programs or low-income discounts are a more efficient way to assist low-income customers. May 1 Statement at 65 n.43. NCLC argued that there is no need to choose between energy efficiency and discounts for low-income customers; both are effective and both are needed for their particular purposes (NCLC May 24, 1996 Comments at 4-7; see also Tr. 10, at 133). The Department agrees that each type of assistance addresses specific needs, and adopts NCLC's position that both types of assistance will continue to be useful and appropriate.

¹³⁰ These objectives are delineated in D.P.U. 95-30, the 1993 Massachusetts State Energy Plan (prepared by the Massachusetts Division of Energy Resources), and the National Energy Policy Act of 1992.

programs toward market-driven and market transformation initiatives,¹³¹ and include a customer information component. Id. Furthermore, the Department stated that energy efficiency plans should include budget levels that are designed to recover the costs of only those energy efficiency services that cannot be provided by the market, and that proposals should include the recovery of lost base revenue ("LBR")¹³² and/or incentives only for those portions of the programs that continue to exhibit characteristics of traditional electric company DSM programs.¹³³ Id. at 68 n.47. In addition, we proposed to require each distribution company to develop an energy efficiency program for low-income customers to be delivered in coordination with the local weatherization assistance program ("WAP") agencies.¹³⁴ Id. at A.22. The May 1 Rules stated that the Department would review energy efficiency plans when filed, and then again after three years. Id. at A.21.

Finally, in the May 1 Statement, we stated that we anticipated that targeted DSM may continue to be a less costly alternative to distribution company system upgrades, and that

¹³¹ Our Model Rules define "market transformation initiatives" as "strategic efforts to offset market failures and to induce lasting changes that result in increases in the adoption or penetration of energy efficient technologies or practices." 220 C.M.R. § 11.07.

¹³² LBR compensates an electric company for sales erosion resulting from the successful performance of the company's energy efficiency programs that affects revenues in a significant, quantifiable way. See Western Massachusetts Electric Company, D.P.U. 89-260, at 104 (1990).

¹³³ Traditional electric company DSM program savings are readily quantifiable per measure and per customer, which is not likely to hold true for savings from market transformation programs.

¹³⁴ WAP, operated by the Massachusetts Executive Office of Communities and Development, provides assistance to low-income customers by combining education with the implementation of major conservation measures at no cost to participants. Mass-Save, Inc., D.P.U. 96-49, at 4 n.4 (1996).

performance-based ratemaking should provide the incentive for distribution companies to choose the least-cost alternatives in pursuing needed distribution system expansions. Id. at 65 n.44.

2. Issues Raised

Various commenters supported the Department's proposal to require distribution company involvement in energy efficiency, while offering refinements to our May 1 Rules in certain areas, which are discussed below. The issues addressed include (1) continuation of retrofit-based DSM programs, (2) reduction of DSM program budgets and the continued need for financial incentives, (3) the need for objectives and measurement criteria for market transformation activities, (4) delivery of energy efficiency services to low-income customers, (5) Department review of energy efficiency plans, and (6) the role of energy efficiency in a least-cost distribution strategy.¹³⁵

Many commenters agreed with our emphasis on market-driven and market transformation activities in energy efficiency (Tr. 10, at 132; DOER May 24, 1996 Comments at 49-51; CLF May 24, 1996 Comments at 19). Some commenters stated, however, that the type of energy efficiency activity that is appropriate will depend on the technology involved, arguing that a retrofit component may be necessary for certain technologies in the early stages of their development (DOER May 24, 1996 Comments at 47; MEEC May 24, 1996 Comments at 5 n.2, 10). DOER

¹³⁵ Some commenters supported a continuing, but undefined, role for electric company-sponsored energy efficiency after the transition to a competitive industry (MEEC August 2, 1996 Comments at 6-9; Business for Social Responsibility Education Fund May 24, 1996 Comments at 5); while MassPIRG recommended that a goal be established of improving energy efficiency in Massachusetts by 15 percent within ten years (MassPIRG August 2, 1996 Comments at Att. 1; MassPIRG May 24, 1996 Comments at 3).

stated that support of certain retrofit-based programs may be appropriate in conjunction with a broader approach to the commercialization of specific technologies with large retrofit potentials (DOER May 24, 1996 Comments at 50). CLF argued that retrofit program delivery capability should be maintained because of the uncertainty regarding the role that energy efficiency investment will play in providing least-cost distribution services (CLF August 2, 1996 Comments at 18). Some commenters cautioned the Department against eliminating retrofit programs if market imperfections continue (Attorney General May 24, 1996 Comments at 39; EPA May 24, 1996 Comments at 2; CLF August 2, 1996 Comments at 18).

Several commenters argued that the Department should not order reductions in DSM budgets¹³⁶ (CLF August 2, 1996 Comments at 20; MEEC August 2, 1996 Comments at 5-6). In addition, some commenters emphasized the need for continued financial incentives and possibly LBR recovery¹³⁷ for the distribution companies for successful implementation of energy efficiency programs, arguing that if the Department were to eliminate current incentives, some distribution companies might be reluctant to participate in market transformation activities (Tr. 10, at 210, 235; CLF August 2, 1996 Comments at 20). Commenters also addressed the need for clear objectives and measurement criteria for market transformation activities, while some agreed that

¹³⁶ Some electric companies argued that DSM budgets should be reduced in order to lower rates (see Tr. 10, at 140).

¹³⁷ WMECICG pointed out that LBR would apply only to reductions in distribution service revenues, because the distribution company will incur no lost revenues from transmission or generation services (WMECICG May 24, 1996 Comments at 36-37).

measurement could be based on criteria other than KWH savings¹³⁸ (Tr. 10, at 148, 213, 214, 216; CLF May 24, 1996 Comments at 19; MEEC May 24, 1996 Comments at 10-11). Some commenters suggested that the issues of measurement and incentives should be addressed separately from the restructuring proceeding in a collaborative effort or in company-specific proceedings (Tr. 10, at 244-246, 249).

Many commenters agreed that opportunities for low-income customers to obtain energy efficiency services should continue, and they offered several suggestions for improving delivery, such as through gas and electric company coordination, or through a quasi-public agency separate from the utilities and the Department (Attorney General May 24, 1996 Comments at 40; MassPIRG May 24, 1996 Comments at 3; FSC May 24, 1996 Comments at 5; Tr. 10, at 143, 193, 205, 229). DOER argued that the local WAP agencies might not be the most appropriate entities with which electric companies should coordinate delivery of energy efficiency services, depending on service territory characteristics and resources available (Tr. 10, at 197).

Several commenters recommended that the Department review the energy efficiency plans more frequently or sooner than was proposed in our May 1 Rules,¹³⁹ because the uncertainty surrounding market transformation activities warrants earlier Department assessment of the plans (DOER May 24, 1996 Comments at 51; CLF May 24, 1996 Comments at 20; Tr. 10, at 198-199).

¹³⁸ MEEC suggested that market transformation activities could be measured by net market impact, such as market saturation of a technology, or development and commercialization of a technology in the research and development stage (Tr. 10, at 214, 241).

¹³⁹ MEEC argued that, if the Department does not include incentives and evaluation criteria for energy efficiency, we should review energy efficiency programs annually (Tr. 10, at 201-202).

One proposal was to require a "two-plus-three-year approach," in which the distribution company would file a detailed two-year plan, and a conceptual description of activities for the subsequent three years (Tr. 10, at 199-200, 202). After two years, the distribution company would file a three-year plan to respond to the changes in the industry since the initial filing of the plan¹⁴⁰ (id.).

Commenters agreed with our recognition of the role of energy efficiency as part of a least-cost distribution strategy (MEEC May 24, 1996 Comments at 6). At the hearings, however, CLF contended that the May 1 Statement did not adequately address the issue of distribution company investments in energy efficiency as an alternative to investment in traditional utility infrastructure, and that PBR is not likely to provide a sufficient incentive to encourage this type of investment (Tr. 10, at 148-149, 153). The Attorney General maintained that energy efficiency will remain an important part of least-cost distribution services planning, and that the Department should continue to emphasize its importance (Attorney General May 24, 1996 Comments at 40).

3. Current Department Proposal

For the reasons cited in our May 1 Statement and corroborated in the various comments received in this proceeding, we reaffirm our position that there is a role for distribution companies in providing energy efficiency services during the transition to a competitive energy market, and that the need for regulatory oversight of these programs remains. Our Model Rules

¹⁴⁰ There were, however, some commenters who argued for a shorter transition period to market transformation, i.e., two years (see BECo August 2, 1996 Comments at 36; see also Tr. 10, at 165).

require distribution companies to file energy efficiency plans that include (1) an education component, (2) a proposal for support of market transformation initiatives, (3) a description of market-driven energy efficiency efforts, (4) proposed budgets and incentives, (5) a description of evaluation criteria, and (6) a proposal for coordinating delivery of energy efficiency to low-income customers with appropriate local community service agencies.

We maintain our view that a movement toward market-driven and market transformation activities is appropriate. However, we agree that retrofits may continue to be effective tools for transforming the market in certain applications. Therefore, in its energy efficiency plan filing, each distribution company should propose energy efficiency activities appropriate to each technology or market sector it is targeting, and explain how that activity furthers the movement toward market transformation for that technology or market sector.

Determination of appropriate budget levels, incentives, and measurement of energy efficiency activities requires a level of detail that is beyond the scope of this proceeding. These details will be set in the initial adjudications of company-specific energy efficiency plans. Thus, distribution companies should provide descriptions and supporting documentation for each of these elements. The Department encourages electric companies to work with stakeholders in a collaborative fashion to develop their proposed energy efficiency plans.

Regarding the timing of Department review of energy efficiency plans, we recognize that the electric industry may change substantially, and in ways which cannot be foreseen, so that energy efficiency plans filed in 1997 may not reflect market realities five years later. We therefore adopt the recommendation of a two-plus-three-year approach for review of energy efficiency plans, and the Model Rules require each distribution company to file a detailed two-year plan

accompanied by a projection of activities in the subsequent three years. The plan would be refined and adjusted through a second filing after the first two years to provide details of activities for the following three years. The Department will review each distribution company's plan at the time of its filing. The Department will also require electric companies to file biennial reports on the results of their energy efficiency activities.¹⁴¹

The Department continues to view targeted DSM as a possible alternative to distribution-system upgrades. We put distribution companies on notice that we expect their initial PBR proposals to include a plan, along with supporting documentation, for investing in targeted DSM or distributed generation when these strategies are the least-cost alternatives to distribution-system upgrades.

Distribution companies, through their unique relationship with their customers, have information on customer consumption patterns not currently available to other energy efficiency providers. In order to mitigate any possible competitive advantages a distribution company or affiliate may have when supplying energy efficiency products or services to its customers, and to support the further development of the energy efficiency industry, the Department has included a requirement in 220 C.M.R. § 12.03(9) that customer-specific information provided by a distribution company to its competitive affiliate be provided simultaneously to non-affiliated suppliers transacting business in its service territory. 220 C.M.R. § 12.02(4), which defines "competitive affiliate," includes selling or marketing DSM on a competitive basis as an affiliate

¹⁴¹ Biennial reporting requirements will be revised from current annual reporting requirements to be consistent with the energy efficiency plans to be filed pursuant to Model Rule 220 C.M.R. § 11.07.

activity that is covered by this rule. In addition, the Model Rules require that distribution companies make provisions to keep customer information confidential from affiliates and non-affiliates, if a customer so requests.

In recognition of the unprecedented changes in the electric industry, and corresponding changes in the energy efficiency industry, we will continue to monitor developments in this area, as well as distribution company participation in energy efficiency initiatives during the transition period.¹⁴² At the end of that time, the Department and others should be better able to determine the nature of any continuing role for distribution companies in the provision of energy efficiency services.

D. Distributed Generation

1. Ownership of Distributed Generation

a. Introduction

During the course of the restructuring debate, the question has been raised regarding whether distribution company ownership of small-scale generation facilities should be allowed, if such facilities represent a cost-effective alternative to investing in increased distribution system capacity. A related question involves the implementation of DSM programs targeted at specific portions of a distribution system, again for the purpose of deferring or avoiding distribution upgrades.

¹⁴² The Department notes that, in addition to electric company-sponsored energy efficiency programs, the state-mandated Energy Conservation Service ("ECS") program will continue as an education and information program resource in Massachusetts. See G.L. c. 164 App., §§ 2-1 et seq. DOER is currently undertaking a comprehensive review of the ECS program (Tr. 10, at 208-209).

In the May 1 Statement, the Department stated that functional separation of generation, transmission, and distribution, including the creation of separate corporate entities, would be the minimal acceptable approach to limiting vertical market power. May 1 Statement at 25. The Department also suggested that in a restructured electric industry, distribution companies might choose to locate appropriately-sized generation facilities or targeted DSM¹⁴³ in distribution-constrained areas when either is the least-cost alternative to distribution system upgrades. May 1 Statement at 41.¹⁴⁴ Several commenters responded to the Department's questions regarding the possibility and desirability of distribution company ownership of small-scale generation and the prospect of such generation being competitively supplied.

b. Issues Raised

Many commenters stated that, in the case of distributed generation, distribution companies should be allowed to own and operate small-scale generating units when they are the least-cost alternatives to distribution system upgrades (WMECo May 24, 1996 Comments at 41; Attorney General May 24, 1996 Comments at 18). Some commenters stated that distributed generation and targeted DSM would be better provided by competitive suppliers (DOER May 24, 1996 Comments Section II at 36; Joint Supporters May 24, 1996 Comments at 9).

¹⁴³ The terms "distributed generation" and "targeted DSM" have been used to describe efforts to augment the network of large generating plants and to optimize the use of distribution systems by locating small-scale generating units and/or focusing DSM efforts in areas where the distribution system would otherwise be constrained.

¹⁴⁴ The Department expects that well-designed PBR plans will provide sufficient incentives to distribution companies to choose distributed generation and targeted DSM when either one is the least-cost option.

A presentation at a recent Electric Power Research Institute ("EPRI") conference emphasized that distribution company-owned generation conflicts with competitive principles because distribution companies would have several unfair advantages over potential competitors (The Distributed Generation Utility: A Restructured Perspective, November 8, 1996).¹⁴⁵ The distribution company could use distribution system benefits to offset the costs of generation. Id. In addition, distribution companies would have an advantage in the market for strategically-located generation that would exacerbate problems of locational market power. Id. The application of monopoly distribution benefits to generation would be an inherently anticompetitive ratepayer cross-subsidy, helping the distribution company to leverage its monopoly franchise into areas where there is no natural monopoly. Id. These advantages, combined with the distribution company's ability to use proprietary information to preempt action by others, could be used to ensure that no competitive suppliers would succeed at locating generation in a distribution-constrained area. Id. Further, distribution company ownership of generation would reduce the benefits of transmission congestion contracts and, therefore, should be prohibited. Id.

c. Current Department Proposal

While the Department is concerned about the possible anticompetitive effects of allowing distribution companies to own generation, the Department also considers distributed generation

¹⁴⁵ The presentation cited here will be included in the Proceedings of EPRI's Second Annual Distributed Resources Conference: Technology and Market Strategies for a Competitive Environment, to be released in May 1997. This presentation was received by the Department with a letter dated November 27, 1996 and placed in the record of this proceeding.

technologies an important alternative to central station resources if such technologies represent a least-cost solution to distribution upgrades. We recognize that the current regulatory framework does not promote distributed generation and plan to implement policies to encourage economically efficient distributed generation opportunities.

Based on input from commenters, the Department is concerned that, during the transition, distribution companies may engage in anticompetitive behavior if they are not prohibited from owning generation. We note that competitive suppliers may not have adequate opportunities to provide generation in distribution-constrained areas if they have to compete with the generation efforts of distribution companies. However, at this time, the Department will not preclude distribution company ownership of distributed generation. Instead, we strongly encourage distribution companies to provide opportunities for competitively offered or customer-owned distributed generation options. When there are opportunities to reduce or avoid distribution system upgrade costs through distributed generation or targeted DSM, distribution companies should build or competitively procure generating facilities that interconnect at distribution/substation levels.¹⁴⁶ Any output from such facilities could be sold bilaterally or on the spot market.

To further stimulate competition, a distribution company may provide financial incentives for appropriately-sized generation or targeted DSM in distribution-constrained areas; such generation could be procured through a request for proposals. Such an incentive program would

¹⁴⁶ Under a price cap approach, such facilities would not be eligible for rate base/rate of return treatment.

catalyze construction of distributed generation where it might not otherwise be built and allow ratepayers to share the benefits of distributed generation during the development of a competitive market for generation.

2. Net Metering

a. Introduction

Net metering or billing is an arrangement in which a customer may at various times receive power from its distributor and at other times run its meter backwards. When more electricity is generated by a customer's facility than is consumed on premises, the excess electricity flows out of the premises and into the electric company's distribution lines, causing the meter to run backwards and to register a decrease in the kilowatthours used for billing purposes. Current Department policy on this matter is embedded in the rules implementing PURPA, which provide that qualifying facilities with a capacity of 30 KW or less have the option to run their meters backwards and receive an energy payment at the short-run energy rate of their electric company for the positive net difference between KWH delivered and consumed. 220 C.M.R. § 8.04(2)(c). The Department anticipates that residential and small commercial customers will continue to be interested in installing and owning renewable resources or small power and cogeneration units in their homes or places of business. In the May 1 Statement we asked, first, whether to continue net metering or billing, and second, if so, what these small, customer-owned generating units should be paid for their generation (i.e., the retail sales rate or the market price for generation). May 1 Statement at 41-42.

b. Issues Raised

Most commenters stated that these customer installations should be encouraged for economic and environmental reasons, including the promotion of environmentally beneficial technologies (Tr. 9, at 221-228). On the one hand, some commenters argued that the full, bundled retail rate of electric service is too high a price to pay for energy from small-scale residential generators since the value of such generation lies in the avoidance of only a portion of the costs embedded in that rate (DOER May 24, 1996 Comments at 45-46; Tr. 9, at 217, 219). On the other hand, the Massachusetts Oilheat Council ("MOC") argued that the full retail rate should be paid, on the theory that self-generation avoids all the costs of generation, transmission, and distribution for those KWHs that would otherwise be incurred (MOC May 24, 1996 Comments at 5). MOC also requested that the Department make clear that the net billing rule would apply to all small-scale generation, not just to renewables (id.). Intelligen proposed that the Department allow small-scale (30 KW and less) generators to run their meters backwards and be compensated at the "market generation price" for those KWHs that are in excess of consumption on a monthly basis (Intelligen May 24, 1996 Comments at 4).

c. Current Department Proposal

We conclude that distributed generating facilities (renewable and otherwise) provide potential economic benefits to all customers, such as avoiding the costs of distribution upgrades, and environmental benefits, such as increasing the opportunity for environmentally benign emerging technologies to enter the market. Therefore, we will continue to allow meters to be run backwards for units of 30 KW or under in size. Also, we find that any payments by a distribution company for the positive net difference between the energy generated by the unit and the energy consumed in any one-month period should be at a price equal to the average market

clearing price for generation for that month, since, on average, that is the price the distribution company would have had to pay to replace the power supplied by the customer-owned generator.

SECTION X -- MUNICIPAL ISSUES

Another area of concern in restructuring involves how the Department can achieve its goals for investor-owned electric companies and their customers while respecting the rights, roles and expectations of the Commonwealth's 351 cities and towns. This section discusses three issues facing municipalities in a restructured electric industry: the role of municipal light plants; municipal load aggregators; and property tax implications.

The Department acknowledges that our jurisdiction over municipal light plants, by statute, is not as extensive as it is over the activities of investor-owned electric companies. While we encourage municipalities to provide choice of generation supply to their citizens, communities that operate municipal light plants will decide for themselves whether to sell generation to consumers outside of their service territories and thereby allow others to sell generation to their own customers. If a municipal light plant decides to sell generation to consumers outside of its service territory, the Department proposes a policy of reciprocity; investor-owned electric companies would not be required to open their service territories to retail competition from a municipal light plant unless the municipal light plant extends reciprocal rights to all suppliers with respect to its own service territory. We believe such a policy of reciprocity is consistent with our existing authority and creates a level playing field among all suppliers of electricity. The Department proposes that the Legislature codify this policy of reciprocity.

Some municipalities have expressed an interest in municipal load aggregation, whereby a municipality would match a supply portfolio with demand from its citizens for the purpose of lowering the overall cost of electricity. Some are concerned that absent load aggregation, residential consumers will not have the same bargaining power as large commercial and industrial consumers. The Department's Model Rules support the creation of municipal load aggregators and other forms of aggregation on a voluntary basis. We propose that the Legislature adopt a provision that expressly grants municipalities, on a non-exclusive basis, the right to act in the role of load aggregator.

With respect to local property taxes, many municipalities are concerned that restructuring will give rise to a loss of tax revenue from electric companies, resulting in the redistribution of the tax burden to other taxpayers, including local homeowners and small businesses. This issue has two components: (1) the possible devaluation of utility plant; and (2) the possible reclassification of electric generating companies as manufacturers whose equipment is exempt from local property taxes under G.L. c. 59, § 5, Clause Sixteenth. In order to achieve an equitable resolution of this issue, and to ensure that the transition is minimally disruptive to municipalities and taxpayers, we offer two legislative recommendations. With respect to the first component, we

recommend that the Legislature exempt electric companies from paying property taxes but require them to enter into binding agreements to make payments in lieu of taxes to host municipalities during the transition from a regulated industry to a competitive market. Such payments would be based on the greater of the fair cash value or the fair cash value plus the revenues a utility receives as stranded cost recovery. With respect to the second component, the Department recommends that legislative changes to the statute be made because different forms of tax treatment for different types of generators will otherwise result in competitive distortions over time. We note that the Commonwealth and municipalities may eventually need to consider different forms of taxation. Our interest is ensuring that the tax burden on electric companies is not excessive, to avoid competitive distortions and reduce overall electric rates.

SECTION X -- MUNICIPAL ISSUES

A. Municipal Light Plants1. Introduction

As the Department moves to a restructured electricity industry with direct retail access for consumers, municipal light plants will have the choice of whether to sell generation to consumers outside of their service territory and thereby allow others to sell generation to the municipalities' customers. We reiterate our May 1 position that we do not seek to require municipal light plants to open their service territories to retail competition. At issue is whether, under the present statutory scheme, G.L. c. 164, §§ 34 et seq., the Department has the authority to require municipal light plants to open their service territories to other suppliers if municipal light plants decide to sell their power in other service territories.

In the May 1 Statement, we outlined the nature and extent of our statutory authority in regulating municipal light plants as compared to investor-owned utilities ("IOUs"). May 1 Statement at 31-32. The Department's oversight and authority over municipal light plants are not as extensive as they are over the activities of IOUs.¹⁴⁷ Newbay Corporation,

¹⁴⁷ In Newbay, the Department discussed the differences in statutory authority:

The general statutory scheme of G.L. c. 164 which governs the Department's authority over IOUs and municipal light plants distinguishes between the two. See, e.g., G.L. c. 164, § 1 (definition of electric company does not include municipals); G.L. c. 164, § 76 (source of supervisory authority over IOUs generally inapplicable to municipals); 220 C.M.R. §§ 8.00, 9.00, 10.00 (resource acquisition regulations applicable only to IOUs). Compare G.L. c. 164, § 94 (granting IOU ratemaking authority to Department) with G.L. c. 164, §§ 58-59 (empowering Department to investigate discriminatory rates of municipal light departments without

(continued...)

D.P.U. 88-265, at 17-18 (1994) ("Newbay").

In D.P.U. 95-30 and in D.P.U. 96-100, various municipal light plants argued that the Department lacks jurisdiction to impose certain restructuring policies upon municipal utilities, such as retail wheeling, rate unbundling, and forced divestiture of assets (see e.g., D.P.U. 95-30, Initial Comments of the Massachusetts Municipal Light Plants ("MMLP") at 52-55, 61-64 in D.P.U. 95-30; MMLP May 24, 1996 Comments at 15-16).

¹⁴⁷(...continued)

granting ratemaking authority). There are, however, areas where the statute and regulations apply equally to municipals and IOUs. See G.L. c. 164, § 69G(4) (definition of electric company under statutes pertaining to construction of jurisdictional facilities and forecast/supply plans includes municipals); G.L. c. 164A, § 9(b)(1)(iv) (making provisions of G.L. c. 164, §§ 71-74, 76, 87-88, 90-91 applicable to municipal light department members of the New England Power Pool with respect to electric power facilities); 220 C.M.R. § 25.00 (billing and termination regulations expressly apply to IOUs and municipals).

In addition, the statutory framework and judicial interpretation of that framework indicate that the Department ought to defer to the judgment of elected municipal officials in many matters pertaining to management of municipal light plants. See G.L. c. 164, § 56 (indicating municipal light plant manager responsible for operation and management under direction of local officials); Board of Gas and Electric Commissioners of Middleborough v. Department of Public Utilities, 363 Mass. 433, 438 (1973) (special provisions of G.L. c. 164 applicable to municipal light boards indicate legislative deference to rates fixed by public officers acting under legislative mandate). The Department does, however, have review authority over certain actions of municipal light plants and, while it will defer to the judgment of municipal officials, the Department cannot ignore its oversight responsibilities. See Bertone v. Department of Public Utilities, 411 Mass. 536, 548 (1992) (light plant discretion to alter rates not unlimited and Department has statutory power to regulate); Holyoke Water Power Company v. Holyoke, 349 Mass. 442, 446-447 (1965) (Department has substantial supervisory powers over municipally-owned plants).

2. Issues Raised

Reciprocity has been supported by some municipal entities and deemed beyond the jurisdiction of the Department by others. On the one hand, the Massachusetts Municipal Association stated that "it seems fair to require a reciprocal structure in which a municipal utility having authority to sell to customers outside of its jurisdiction should be required to offer reciprocal access to its customers" (MMA May 24, 1996 Comments at 2). On the other hand, the MMLP stated that the Department does not have the explicit or implicit authority currently to prevent municipal light plants from selling their power in the competitive retail market when a municipal does not open its system to retail competition, *i.e.*, the Department does not have the authority to condition municipal light plants' entry into the competitive retail market (MMLP May 24, 1996 Comments at 15).

As the basis for their argument that the Department lacks the authority to order reciprocity, the MMLP stated that the Department lacks the authority to order retail wheeling for municipal light plants for several reasons. First, there is no express statutory authority for such action by the Department. The statutes that the Department has relied upon for this rulemaking are G.L. c. 164, §§ 76 and 94, which do not apply to municipal light plants.¹⁴⁸ Second, there is no implied authority for such action by the Department. The Department's statutory authority regarding municipal light plants is limited in focus and subject matter and is not broad enough to grant implied authority to the Department. Third, the Department has acknowledged its limited supervisory role over municipal light plants. Fourth, the legal framework governing municipal

¹⁴⁸ The MMLP did not note that the Department also relies upon G.L. c. 164, § 69I as a statutory basis for this rulemaking, which does apply to municipal light plants.

light plants is inconsistent with mandatory retail wheeling. Retail wheeling, which would seriously infringe on municipal light plants' franchise territories, is inconsistent with existing statutes that grant municipal light plants distinctive and stronger franchise rights than IOUs.¹⁴⁹ Fifth, federal law may preempt the Department in this area. The MMLP assert that once power enters the transmission system, especially in an area like New England in which electric company transmission is interconnected through NEPOOL, it becomes an interstate transmission transaction which is subject to FERC jurisdiction; therefore retail wheeling by the states may be subject to FERC jurisdiction.¹⁵⁰ Finally, practical and historic reasons exist to treat municipal light plants differently, such as comparatively low rates, the absence of shareholders to whom to assign any stranded costs that might result from the introduction of retail competition, an inability to deduct any losses from taxes, the possibility that municipal bond ratings would be placed in jeopardy, and limitations on the sale of electricity generated by tax-exempt facilities outside of a municipal's service territory (MMLP March 31, 1995 Comments at 52-73). The MMLP conclude, without citation to statutes or case law, that because the Department has no authority to order retail wheeling for municipal light plants it has no authority to condition

¹⁴⁹ Section 34 of G.L. c. 164 authorizes cities and towns to own and operate municipal light plants. Section 35 of G.L. c. 164 authorizes a town to acquire a light plant by a two-thirds town meeting vote. Section 42 of G.L. c. 164 authorizes a town to purchase generation and distribution plant of any existing provider of electricity. Section 67 of G.L. c. 164 requires a town vote to legislate a light plant out of existence; and Section 68 of G.L. c. 164 requires a town to seek permission from the Department if it wishes to sell its plant. The MMLP argue that IOUs do not have a comparable statutory basis to their franchises. MMLP March 31, 1995 Comments at 63-64 in D.P.U. 95-30.

¹⁵⁰ The FERC has jurisdiction over the transmission of electricity in interstate commerce. 16 U.S.C. § 824(b)(1).

municipal entry into the retail wheeling market place by requiring reciprocity (MMLP Initial Comments at 52-68 in D.P.U. 95-30).

3. Current Department Proposal

We reaffirm our preliminary view as set forth in the May 1 Statement at 33 that, for purposes of this rulemaking, the Department does not intend to impose restructuring policies on municipal light plants that might be interpreted as an expansion of the Department's authority. Rather, the Department intends to preserve the current jurisdictional bounds while encouraging municipal light plants to participate voluntarily in the future restructured electric industry.¹⁵¹ Because municipal light plants are governed by local officials who are accountable to their citizens, those elected local officials should determine the extent of the involvement of municipal light plants in a restructured, competitive industry. At the same time, we do not want to foreclose or inhibit any opportunities for municipal light plants, and we must be mindful of the interests of those retail customers of municipal light plants who in the future may wish to obtain direct access to the competitive market for power. The Department therefore seeks to create an environment that allows municipal light plants to participate in a restructured industry on an equivalent basis to that of the IOUs. This type of participation would be accommodated by a

¹⁵¹ Where our statutory authority permits, and where fair and logical public policy dictates, we have applied the restructuring principles to municipal light plants. See Stow Municipal Light Department, D.P.U. 94-176, at 43 (1996), in which the Department applied principles of D.P.U. 95-30 to a dispute between two municipal light plants involving the statutory determination by the Department of the property and price to be included in the acquisition of one town's plant by another; the Department stated that "[a] fair and logical policy regarding stranded costs requires that municipal electric systems be treated similarly to investor-owned utilities, except where substantial differences warrant different treatment."

system of reciprocity where, if municipal light plants supplied power to customers within the service territories of IOUs, then other suppliers of generation would be allowed to supply power to customers within the service territories of municipal light plants.

Even if we were to grant that, because of our limited oversight of municipal light plants, we do not have authority to condition a municipal's entry into the competitive retail marketplace by requiring reciprocity, the statutory scheme under G.L. c. 164 grants us considerable jurisdiction over and broad supervision of IOUs.¹⁵² Therefore, employing our considerable authority over the conduct of IOUs, the Department will not require electric companies to open their service territories to retail competition from any individual municipal light plant unless that municipal light plant extends reciprocal rights to all suppliers of generation with respect to its service territory. Having reviewed comments on this issue, we conclude that a policy of reciprocity which is focused on electric companies rather than municipal light plants is consistent both with our jurisdictional authority and with our stated principle of providing full and fair competition among all sources of supply. Local municipal officials retain the authority to decide when to

¹⁵² See, e.g., G.L. c. 164, § 76 (general supervisory authority); G.L. c. 164, §§ 3-33 (oversees corporate matters, including the issuance of securities); G.L. c. 164, §§ 69G-69R (approves demand forecast and supply plans); G.L. c. 164, §§ 69G-69R, 87-92, and 124-125 (ensures that electric companies fulfill their traditional obligation to serve); G.L. c. 164, §§ 76A, 85, 86A and 94B (maintains heightened oversight over utility affiliated transactions); G.L. c. 164, §§ 72, 87-91 and G.L. c. 166, §§ 21-28 (reviews and approves distribution and transmission lines with eminent domain authority); G.L. c. 164, §§ 80-83 (reviews books and records); G.L. c. 164, § 94 (approves rates); G.L. c. 164, § 94A (preapproves contracts for the long-term purchase of electricity); G.L. c. 164, § 94G (reviews and approves fuel costs and charges, and generating unit performance and procurement practices); G.L. c. 164, § 96 (reviews acquisitions and mergers of utilities); G.L. c. 164, §§ 116, 118, 120 (oversees electric meters); G.L. c. 164, §§ 124-125A (oversees shutting off service).

enter the competitive retail market; and all suppliers of generation, including municipal light plants, are treated equally.¹⁵³ In addition, the Department will seek legislation to codify the Department's policy on reciprocity (see Appendix B, Legislative Proposal, SECTION 12).

B. Municipal Load Aggregators

1. Introduction

The restructured electric industry will accommodate a large number of suppliers, including generators, load aggregators, marketers, and brokers (see Section VII). One form of aggregation of particular interest to municipalities is that of municipal load aggregation. Generally, a municipal load aggregator would match a supply portfolio with demand from all interested municipal residents for the purpose of enhancing the bargaining leverage of consumers to lower their overall cost of electricity. In D.P.U. 95-30, at 18-19, the Department stated that customer choice of electric services can be addressed through a number of mechanisms. One mechanism included a structure whereby entities would compete to provide services to customers in a specific geographic area (e.g., a municipality, or group of municipalities, sometimes referred to as a "competitive franchise") (id.). In this proceeding, the competitive franchise and other forms of municipal load aggregation have been proposed for Department consideration.

¹⁵³

A similar approach was taken by the California Public Utility Commission and by the California Legislature. See Order Instituting Rulemaking on the Commission's Proposed Policies Governing Restructuring California's Electric Services Industry and Reforming Regulation at 75-76, R-94-04-031, I-94-04-032 and California Public Utilities Code, An Act Relating to Public Utilities, SEC. 12, Division 4.9, Section 9600-9606.

2. Issues Raised

Various commenters, in particular municipalities, supported the creation of municipal load aggregators. The Barnstable County Commissioners stated that local governments are natural load aggregators:

One reason is that local government already aggregates and provides services to citizens for some 22 different services ranging from waste disposal to ambulance service. Another reason is that, historically, local governments commonly offered electric service franchises to competitive bidding before the establishment of a monopoly electric industry and mandatory rate filings in the 1920s. Local governments also offer non-discriminatory, publicly-accountable access with open-bidding rules, mechanisms to aggregate consumers, and structures to enter into joint service projects with other communities. They offer planning efficiencies and ancillary benefits that might otherwise be lost in a volatile competitive marketplace.

(Barnstable County Commissioners August 2, 1996 Comments at 8-9). The Massachusetts Municipal Association stated that many municipalities have expressed interest in joining with other municipalities to purchase electricity for their own use, and on behalf of any interested electricity consumers located in the municipalities (MMA May 24, 1996 Comments at 2). The Cape & Islands Self Reliance Corporation argued that its competitive franchise proposal is the best model for aggregating ratepayers (Cape & Islands Self-Reliance August 2, 1996 Comments at 1-2).¹⁵⁴

Various commenters stated that government entities which act in the role of load aggregators provide additional benefits to consumers over those offered by other types of

¹⁵⁴ The competitive franchise model anticipates that a municipality or other governmental entity would competitively bid out the entire electricity franchise for that entity. In this event (1) the distribution system would be rented from the previous electric company provider; (2) the new provider could purchase the distribution system; or (3) the governmental entity could take the distribution system by eminent domain (Barnstable County Commissioners March 31, 1995 Comments at 14).

aggregators. The Barnstable County Commissioners argued that the standards to which municipalities are held, including open-bidding requirements and ethics laws, should be applied to municipal and other load aggregators (Barnstable County Commissioners August 2, 1996 Comments at 9-10). In addition, they propose a two-step certification and registration process for suppliers,¹⁵⁵ generic standards for supply, distribution, and consumer contracts, and penalties for non-compliance with these standards (employing G.L. c. 93A as a parallel) (*id.* at 10-11). The Cape & Islands Self-Reliance Corporation indicated that compared to private for-profit and non-profit aggregators, government entities that aggregate the load of their citizens will be able to offer the advantage of public accountability to their customers (Cape & Islands Self-Reliance August 2, 1996 Comments at 3). It also stated that government entities must abide by open meeting laws and provide their citizens with ample notice of public hearings and ample opportunity for comment (*id.*).

¹⁵⁵ The Barnstable County Commissioners contend that G.L. c. 164, §§ 87 and 75 grant local municipalities certification and regulatory authority over suppliers other than the existing electric company. G.L. c. 164, § 87 states:

In a town where a person is engaged in the manufacture or sale of electricity, no other person shall lay, erect, maintain or use, over or under the streets, lanes and highways of such town, any wires for the transmission of electricity except wires used by street railway companies for heat or power, without the consent of the aldermen or selectmen granted after notice to all parties interested and a public hearing.

G.L.c. 164, § 75 states:

The aldermen or selectmen may regulate, restrict and control all acts and doings of a corporation subject to this chapter which may in any manner affect the health, safety, convenience or property of the inhabitants of their towns.

The Town of Lexington ("Lexington") stated that the Department should require electric companies to file load aggregation tariffs (Lexington April 12, May 1, and August 2, 1996 Comments). Lexington argued that, because electric companies lack the proper motivation to facilitate load aggregation, the Department must require that electric companies file tariffs with standard provisions for load aggregation (Lexington April 12, 1996 Comments at 15). It argued that the tariff provisions should impose the following requirements on electric companies: (1) each load aggregator should be granted the right to aggregate any or all customers in the electric companies' service territories; (2) group treatment of aggregated load should be the controlling principle and therefore forecasting and measurement should be done by treating all aggregated individual customers as a single pool or group; (3) forecasting and balancing services should be provided, upon request, to load aggregators by distribution companies, acting alone or in coordination with NEPOOL or any future independent system operator; and (4) load aggregators should be free to operate as buyers and resellers of energy, or as agents for other buying or selling entities (*id.* at 15-16).

Lexington further argued that municipal electric companies, at their option, should be allowed to (1) act as agent or as seller of energy services, (2) serve fewer than all residents in a community, as long as all residents are offered the choice to opt in or opt out of the aggregated municipal load, and (3) charge their competitively selected bulk supplier a load aggregation fee (*id.* at 18).

The NCLC stated that municipalities could aggregate customers' loads in one of three ways (NCLC August 2, 1996 Comments at 4). First, municipalities could create municipal light plants pursuant to G.L. c. 164, §§ 34 *et seq.* (*id.*). Second, municipalities could enter into agency agreements with each customer, empowering the municipality to act as buyer for the customer,

and then arrange service for the customer (id.). Third, municipalities could implement the competitive franchise model and run a competitive solicitation to identify the best supplier, and facilitate the process of moving customers from a vertically integrated monopoly to a competitive supply (id.).

The Attorney General supported the concept of municipal load aggregators as long as residents have the option not to become part of the aggregated unit (Tr. 9, at 91-92).

In addition to comments and testimony received during the hearing phase of the rulemaking, we note that, on December 4, 1996, Senators John O'Brien and Thomas Norton filed An Act Authorizing Municipalities to Establish Electric Retail Load Aggregators for the Purpose of Purchasing Electricity in Bulk for the Use and Benefit of Their Inhabitants. The proposed legislation authorizes the establishment of municipal retail load aggregators and mandates the process for their enactment and operation. In addition, the legislation prohibits a municipality from incurring or guaranteeing debt on behalf of a municipal retail load aggregator. Finally, the legislation specifically allows municipal retail electric customers the option to choose to purchase generation from any authorized provider.

3. Current Department Proposal

We continue to support the option of municipal load aggregation as one form of customer choice among many.¹⁵⁶ A municipality may be a natural place for aggregation to occur, since it currently provides numerous other services for its residents on an aggregated basis. In

¹⁵⁶ We do not support the concept of competitive franchise because it would infringe upon electric distribution company franchises by opening the franchise to competition (see Section VI, Distribution Services). Our goal in this proceeding is to open the generation sector to competition.

addition, residents may have a greater sense of comfort and trust with a municipal aggregator with which they have had an historical relationship. Further, citizens may benefit from the existence of open meeting laws, public hearings, and the opportunity to provide comment before selecting a municipal load aggregator. However, we caution that load aggregation could be capital-intensive and can be financially risky. Municipal officials and residents will have to decide whether the municipality wishes to bear that risk or whether it would be borne more appropriately by other parties.

Our support for the concept of municipal load aggregation implies no preference but is merely reflective of our general support for load aggregation. There will be many types of aggregators: governmental, non-profit, and for-profit. In addition, aggregation may occur around different groups, such as trade associations, public interest organizations, or financial interests. We believe that customers should be free to choose which aggregator is best for them. Therefore, in our Model Rules, we do not indicate a preference for any specific form of aggregation. We are confident that the free market will provide customers with a wide range of choices, that customers will make decisions based on their particular interests, and that the most efficient forms of aggregation will emerge through this competitive process.

Whether to become a member of a retail load aggregator should be a voluntary choice for consumers. The Department agrees with the Attorney General that residents should not be required to purchase their electricity from a municipal load aggregator or from any other single entity. Residents must have the option to choose whether they want to be part of an aggregation of municipal customers. Therefore, the Department would not support any model of municipal

or other governmental aggregation, other than that of a municipal light plant,¹⁵⁷ which does not provide each customer the choice of whether to join.

While there do not appear to be any provisions in state law that would limit the creation of municipal load aggregators, there may be value in making express provision for municipalities to serve in this role. Therefore, we express here our support for the general intent of the bill filed by Senators O'Brien and Norton. We particularly favor the provisions of that legislation that offer financial protection for municipalities and that allow for customer choice among all authorized generation suppliers.

C. Property Taxes

1. Introduction

There are approximately 40 municipalities in the Commonwealth that host commercial electric generating facilities, one of which, the Town of Plymouth, hosts the only commercially operating nuclear power plant in the Commonwealth. Many of these municipalities are concerned that, as a consequence of electric industry restructuring and under existing tax laws, electric generating facilities will decrease in value because of their inability to compete successfully in the market, or else that they will be reclassified as manufacturing equipment, which is exempt from local property taxes. According to these municipalities, restructuring will thus result in significant lost tax revenues from electric companies and a redistribution of the tax burden to other taxpayers including local homeowners and small businesses (see, e.g., Town of Plymouth

¹⁵⁷ Once a town or city votes to acquire a municipal light plant pursuant to G.L. c. 164, §§ 34 et seq. every consumer of electricity in that town or city must purchase from the municipal light plant, until the town or city votes to sell such municipal light plant.

August 2, 1996 Comments; Town of Erving August 2, 1996 Comments; City of Everett August 2, 1996 Comments).

Another concern during the transition from a regulated industry to a competitive one is the different tax treatment of regulated and unregulated providers of electricity. Under G.L. c. 63, § 52A, an electric company subject to G.L. c. 164 is required to pay annually a tax upon its corporate franchise equal to six and one half percent of its net income during the taxable year. The taxes assessed pursuant to this section are in lieu of any other taxes under G.L. c. 52. Because the tax rate applied to a regulated electric company's income may be higher than the rate applied to the income of an unregulated supplier, the competitive balance between them may be affected. This situation will be exacerbated if municipalities are permitted indefinitely to accord different local property tax treatment to traditionally regulated and unregulated suppliers.

We acknowledged, in the May 1 Statement at 63, that electric industry restructuring may affect local property tax assessments on generating facilities. We therefore proposed that, when stranded costs in excess of market value for a plant are recovered from customers, municipalities should be entitled to assess property taxes based on the combined market value and the stranded cost recovery allowed to the electric company through a ten-year transition period. We noted that we were prepared to defer to the Legislature in establishing a final policy on this issue because its resolution requires balancing ratepayer interests, which are the historical province of the Department, with local property taxpayer interests, which are more properly represented by elected representatives. Id. at 64 n.42.

2. Issues Raised

The importance of the property tax issue to municipalities became increasingly evident during the course of this proceeding through the comments of several municipalities. The municipalities have raised serious concerns that restructuring will result in significant devaluation of electric company plant, a shift in the tax burden from electric companies to other taxpayers, and the impetus for suppliers to take advantage of the exemption for manufacturers from paying property taxes provided by G.L. c. 59, § 5, cl. 16.

Several municipalities expressed concern about the potential impact on their community that the possible devaluation of utility plant after restructuring would have. These commenters asserted that, if electric generating facilities were devalued as a result of restructuring, the loss of tax revenue from these electric generating facilities would have a devastating effect on the municipalities and their remaining taxpayers on whom the tax burden would fall. Specifically, the City of Everett noted that the property tax that Boston Edison Company pays to the city amounts to 42.5 percent of its municipal tax levy (City of Everett, August 2, 1996 Comments). The Town of Plymouth stated that Boston Edison Company contributes 24.52 percent of its property tax revenue (Town of Plymouth, May 24, 1996 Comments). The Town of Montague hosts two generating units, which together account for 20 percent of that town's tax base (Town of Montague August 2, 1996 Comments). In the Town of Erving, Northeast Utilities' Northfield Mountain Pumped Storage facility contributes nearly 70 percent of the tax revenue for the town (Town of Erving, August 2, 1996 Comments).

Others commented on the impact that would result from the reclassification of generating facilities to manufacturing facilities. Under Massachusetts law, all property "other than real estate, poles and underground conduits, wires and pipes" of a corporation that is engaged in

manufacturing is exempt from taxation. G.L. c. 59, § 5, cl. 16, and G.L. c. 63, §§ 38C and 42B.

The municipalities contended that existing and future electric generating facilities could be organized or reorganized under G.L. c. 156B as manufacturing corporations to reduce their tax liability. In fact, the Department of Revenue noted that a cogeneration facility in the Town of Pepperell, initially organized as a partnership, has been reorganized as a manufacturing corporation (Tr. 6, at 240). As an example of possible tax impacts from such a reclassification, the Town of Erving projected that if Northeast Utilities were to change Northfield Mountain's tax status from "utility" to "manufacturer," the town would have to reduce the tax levy by one third in order to keep the tax rate at the legal limit (Town of Erving August 2, 1996 Comments). However, the Town also projected that, even under this scenario, the average homeowner's tax bill would increase by more than 150 percent and the average business owner's tax bill would increase by 20 percent (id.).

While many commenters noted that necessary changes, if any, to the tax laws would be addressed by the Legislature, they requested assistance from the Department to resolve the issue (Town of Erving August 2, 1996 Comments; July 18, 1996 Fitchburg Public Hearing Tr. at 34-35; July 30, 1996 Salem Public Hearing Tr. at 42-43, 93, 102; July 29, 1996 Plymouth Public Hearing Tr. at 36; October 2, 1996 Greenfield Public Hearing Tr. at 34, 41-42, 117-118). Another commenter suggested that, given the complexity of valuing utility property and the technical limitations of local tax assessors, a state-wide property valuation unit with expertise in utility valuation issues be established (July 30, 1996 Salem Public Hearing Tr. at 61-62).

3. Current Department Proposal

Local tax assessments on utility property represent a significant percentage of some municipalities' tax bases. These municipalities have come to rely heavily on the contributions made by electric companies. Electric industry restructuring may affect local property taxes on two levels: (1) it may reduce the value of utility property, causing a redistribution of the tax burden; and (2) it may prompt the reclassification of generating facilities as manufacturing equipment exempt from property taxation, as suppliers respond to the increasing pressures of a competitive market.¹⁵⁸ Because the local taxation issue is wholly beyond our jurisdiction, our response to commenters is presented not in the form of Model Rules, but rather in a recommended strategy that we are proposing to the Legislature. In developing our approach to the local property tax issue, we believe the Legislature's objective should be to resolve it in a manner that is least disruptive to municipalities and their taxpayers in the short term, that respects the interests and existing commitments of competing providers of electricity, and that is most consistent in the long run with the principles of the competitive market we seek to create. Our recommended approach is designed to ease municipalities through a period of transition to a competitive generation market and to avoid detrimental effects on municipalities and the services they provide to their residents.

Given the complex and problematic potential tax impacts of restructuring, we have concluded that some transitional mechanism must be created to provide municipalities with a

¹⁵⁸ The Department's analysis relates to generating facilities. Senator Therese Murray expressed anxiety about the impact of restructuring on tax revenues related to poles and wires used for distribution purposes (Letter from Senator Murray dated November 6, 1996). Our proposal would not alter the Department's existing regulation of the distribution function. The Department notes that, given the new opportunities envisioned for distribution companies, the value of the poles and wires may increase.

reasonable, but finite, period of time to adjust to the changes a restructured electric industry will bring. To maintain the status quo indefinitely could have significant negative effects on the competitive market and the benefits it will bring to consumers of electricity.

With regard to the potential devaluation aspect of the property tax issue, the Department proposes a three-pronged approach to assist municipalities and electric generators through the transition. First, we propose that existing regulated electric companies should be exempt from personal property taxes, as contemplated by G.L. c. 59 and c. 63. These existing electric companies should be legislatively required to enter into binding agreements with their host municipalities to make payments in lieu of taxes. Such payments should be based on the greater of the fair cash value of utility property or the fair cash value plus the revenues an electric company receives as stranded cost recovery. While an electric company's recovery of stranded costs will decrease over time, we believe municipalities will have a sufficient period of time under this proposal to adjust to changes in the level of tax revenues from electric companies. Second, with respect to existing independent power producers, we propose to continue the current practice of allowing these entities to enter into arrangements with municipalities for payments in lieu of taxes. Finally, with respect to new generators, we encourage voluntary negotiation of binding long-term tax treaties or agreements governing payments in lieu of taxes prior to the siting and construction of these facilities, after which point irrevocable commitments are made and such negotiations have less of a voluntary, non-coercive character.

Given the above recommendations, the issue with regard to the reclassification of generating facilities as manufacturing equipment exempt from property taxation becomes secondary. However, to provide municipalities with leverage in their negotiations with electric

generators which contemplate reclassification as a manufacturer, changes to G.L. c. 59, § 5, cl.16 are necessary to clarify or limit the availability of this exemption for generators.

We note that legislation has been filed that would make the exemption of manufacturing equipment from local property taxes unavailable to electric generating companies.¹⁵⁹ While the proposed legislation may be an expeditious and simple resolution to the problem, we have concerns that the existing statutory framework may continue to cause confusion among municipal officials and electric generators and perpetuate the difference in tax treatment of electric generators.

The exemption of manufacturing equipment from local property taxation does not apply to corporations subject to G.L. c. 63.¹⁶⁰ "Utility corporations," that is, those subject to G.L. c. 164, are subject to taxation under G.L. c. 63, § 52A. Under our proposal set forth today, all electric generators would be subject, to some extent, to G.L. c. 164, and the regulations promulgated thereunder.¹⁶¹ However, the Department notes that the Supreme Judicial Court has upheld an Appellate Tax Board decision to grant a manufacturer's exemption to a producer and

¹⁵⁹ See House Docket 1348 filed by Representative J. Michael Ruane, House Docket 2371 filed by Representative Stephen Kulik, House Docket 2612 filed by Representative Paul C. Demakis.

¹⁶⁰ The exemption provided by G.L. c. 59, § 5, cl. 16, "is not a true exemption from taxation but is an integral part of the method of taxation applicable to all the property of a corporation subject to that section. Section 5, Sixteenth, read with the relevant sections of G.L. c. 63, merely determines which governmental unit may impose a tax upon, or measured by, particular property." Board of Assessors of Holyoke v. State Tax Commission, 355 Mass. 223, 234 (1969). The property of a corporation that is not taxed under G.L. c. 59, § 5, cl. 16, is included in the measure of the excise tax imposed on the corporation under G.L. c. 63.

¹⁶¹ For example, all electric generators would be subject to billing and registration requirements.

distributor of electric power, which, although subject to certain provisions of G.L. c. 164, was considered a corporation subject to G.L. c. 156, the general business corporation law.¹⁶² Board of Assessors of Holyoke v. State Tax Commission, 355 Mass. 223 (1969). While the proposed legislation would provide that municipalities could assess property taxes on the manufacturing equipment of all electric generators, those "utility corporations" deemed to be subject to G.L. c. 164 would continue to be taxed differently from other corporations on the state level. See G.L. c. 63, § 52A ¶ 4.

Given the potential that differing taxation of generating facilities with different legal status could become anticompetitive in the long run, the Commonwealth and cities and towns may need to contemplate other taxation approaches that are more competitively neutral. The Supreme Judicial Court has acknowledged that the current tax scheme's treatment of corporations in the business of generating electricity is inconsistent.

We recognize that there may be some anomaly in taxing [Holyoke Water Power Company], now developed into predominantly a producer and distributor of electric power, in a manner different from the taxation of corporations wholly engaged in distributing electricity. We conclude, however, that the Legislature, by somewhat obscure enactments, and administrative officials, by interpretation, have established such a different method of taxation for [Holyoke Water Power Company]. If it is to be changed after many years, it is a matter for the Legislature and not the courts.

Holyoke, at 244.

¹⁶² Chapter 63, § 38C provides, in pertinent part, "every corporation organized under or subject to ... [G.L. c. 156] which is engaged in manufacturing ... shall for purposes of this chapter be deemed to be a domestic manufacturing corporation.... Every domestic manufacturing corporation shall be taxed in the same manner ... as a domestic business corporation, except in so far as the determination of the excise tax under this chapter may be affected by reason of the exemption from local taxation of the machinery of a domestic manufacturing corporation."

The historic monopoly cost-of-service framework enabled electric companies to make tax payments to host communities without regard to competitive implications. Restructuring now forces a reexamination of the role of local taxation and its consequences. The Department believes the time has come to change the existing tax scheme to ensure that the overall tax burden is not excessive, to avoid competitive distortions, and to achieve meaningful decreases in electric rates for all consumers of electricity. The Department looks forward to working with the Legislature on this issue.

SECTION XI -- STRANDED COSTS IN THE TRANSITION PROCESS

The fundamental changes in the electric industry reflected in the Department's proposal may reduce the opportunity that currently exists for electric companies to recover their full investments in generating plant and other expenditures previously approved by the Department and included in current rates. These potential losses, which may result from subjecting electric company generation to the pressures of a competitive market, are typically referred to as "stranded costs." In the Department's restructuring proceedings -- and in those of other jurisdictions -- no other issue has drawn more attention. The issue of stranded cost recovery requires the Department to balance the interests of ratepayers and shareholders in light of the goals and impacts of restructuring so as to achieve a result that is in the public interest.

Generally, those in favor of allowing electric companies to recover their stranded costs assert that electric companies have property rights under franchises or under a "regulatory compact" with the Department that would be jeopardized by restructuring and for which they are entitled to compensation under state and federal Constitutional provisions that prohibit the taking of private property without just compensation. Those opposed to stranded cost recovery assert that electric companies are not entitled to insurance against the risk that market conditions may not permit full recovery of past investments, that whatever franchise rights and obligations the electric companies have operated under are subject to change, that either the regulatory compact is an illusion or it does not create compensable rights, and that regulatory change does not give rise to a constitutional taking claim.

The Department concludes that there is no clear legal entitlement to stranded cost recovery. However, the Department further concludes that the costly litigation of the electric companies' legal challenges to any attempted denial of stranded costs would significantly delay the benefits of competition for consumers. Accordingly, the Department reaffirms, as a matter of sound public policy, the principle of honoring existing commitments as the most efficient, equitable way of restructuring the electric industry, where electric companies can demonstrate that restructuring would result in stranded costs. The Department concludes that, even in the absence of a clear legal entitlement to stranded cost recovery on the part of Massachusetts electric companies, the Department has sufficient authority under G.L. c. 164, §§ 76 and 94 to provide electric companies a reasonable opportunity to collect net, non-mitigable stranded costs during a transition period, in the public interest. The Department requests that the Legislature adopt this policy, and confirm the Department's authority to allow recovery of stranded costs under G.L. c. 164. The Model Rules proposed herein set forth the method by which electric companies must calculate net, non-mitigable stranded costs.

SECTION XI -- STRANDED COSTS IN THE TRANSITION PROCESS

A. Introduction

In the Order opening D.P.U. 95-30, the Department recognized that, while certain functions of the electric industry may continue to be organized best as a monopoly, this was likely no longer the case for electric generation. Order Opening NOI at 1 (February 10, 1995). The Department set out to reexamine the obligation of electric companies to serve all customers, and to consider means by which regulated companies could participate more effectively in an increasingly competitive generation marketplace. Id. at 2-3. The Department recognized the possibility that such a structural change in the electric industry could reduce the opportunity that currently exists for electric companies to recover the full amount of generation-related investments. These potential losses -- resulting from subjecting electric company generation to the pressures of a competitive market -- have come to be referred to as "stranded costs."

In the Department's electric industry restructuring proceedings -- and in those of other jurisdictions -- no issue has drawn more attention than that of stranded costs. Addressing the issue of stranded costs in a manner that is in the public interest is a major challenge in any effort to restructure the electric industry in Massachusetts. Addressing it soon is important if we are to achieve the benefits of competition in a timely fashion. In this section, the Department discusses many of the legal and technical issues related to the potential stranded costs of Massachusetts electric companies, and proposes a resolution that is consistent with our view of electric company opportunities and responsibilities in the future electric industry structure. The Department also proposes changes to current legislation and regulations that would be necessary in order to implement this proposal.

In D.P.U. 95-30, at Appendix B, the Department conducted a legal analysis of stranded cost recovery including a review of the franchise status of Massachusetts electric companies and whether certain regulatory changes could trigger provisions against takings under the United States Constitution. In that review, the Department found that it remains at best uncertain (1) whether Massachusetts electric companies have exclusive franchises, and (2) if so, whether they would be legally due compensation in the event of electric industry restructuring. Similarly, the Department concluded that it remains uncertain whether Massachusetts electric companies have any legal entitlement to stranded cost recovery based on arguments of confiscation arising from a Department decision to expand competition in the electric generation market and to introduce customer choice. Id. at B.14.

The Department noted, however, that even in the absence of a legal entitlement to stranded cost recovery on the part of Massachusetts electric companies, the Department has sufficient authority under G.L. c. 164, §§ 76 and 94 to provide electric companies a reasonable opportunity to collect stranded costs during a transition period, as long as such recovery is in the public interest. Id. at 33-34. The Department found that a structured transition that allows an appropriate measure of stranded cost recovery would be in the public interest because it may ensure the provision of sound electric services during the transition, and because the reliability of commitments in general will be an essential element in any future industry structure. Id. at 35. The Department also noted that a policy to allow an appropriate measure of stranded cost recovery could facilitate coordination among neighboring states, may discourage reform-delaying litigation, and would reduce the likelihood that companies would restructure to avoid state jurisdiction on stranded cost recovery. Id. at 35-36.

Determination of the level of and mechanism for stranded cost recovery that is consistent with the public interest requires the resolution of a number of distinct issues. In what follows, the Department separates its discussion of and proposal for stranded cost recovery accordingly. First, we review arguments regarding the pros and cons of the entitlement to stranded cost recovery; we conclude by confirming our finding that utilities have not demonstrated a legal right to stranded cost recovery, but also reaffirming our position that, notwithstanding legal uncertainty, there are sound public policy reasons for allowing electric companies a reasonable opportunity to recover their stranded costs. Second, we review these issues and findings as they apply to a particular subset of stranded costs -- power purchase agreements. Third, we review our definition of stranded costs, and refine it in light of the comments we have received. Fourth, we review how, mechanically, stranded costs should be calculated. Fifth and finally, we discuss how stranded cost mechanisms should be structured from a rate design standpoint.

B. Basis for Stranded Cost Recovery

1. Introduction

Stranded cost recovery has been one of the most contentious issues in restructuring. Every aspect of this issue, from the basis for recovery to the bases and methods of calculation, mitigation, allocation and design of a stranded cost recovery charge, has been contested. Resolution of this issue requires the Department to balance the interests of ratepayers and shareholders in light of the goals and impacts of restructuring, in order to achieve a result that is in the public interest.

Consistent with its mandate to act in the public interest, the Department's goal in restructuring, as stated in D.P.U. 95-30, is to create an electric industry structure, using the forces

of competition, that serves the interests of consumers more effectively than the current, cost-of-service system of regulation. Key to this goal is the deregulation of generation and the creation of open, non-discriminatory access to transmission and distribution systems. The Department has acknowledged that these are fundamental changes in the historic framework of monopoly regulation, and that these changes will reallocate risks and benefits for the industry and consumers. D.P.U. 95-30, at 35. Electric companies do not dispute the potential benefits of a competitive generation market to consumers or the ability of either the Legislature or the Department, with Legislative authority, to change the way in which the electric industry is regulated (see e.g., EEC_o August 2, 1996 Comments at 1; FG&E August 2, 1996 Comments at 1). However, to the extent that restructuring results in a situation in which the electric companies cannot recover in the market the costs of their investments and the return on these investments that they now recover under cost-of-service regulation, they claim that restructuring would result in a taking of property that must be compensated, as a matter of law and sound public policy.

The Department's preliminary analysis of the electric companies' claims of legal entitlement to stranded cost recovery, based on franchise rights and the existence of a regulatory compact, found that such claims were debatable. D.P.U. 95-30, at App. B. Nevertheless, even in the absence of a legal entitlement, the Department found that it would be in the public interest and within the Department's authority under G.L. c. 164, §§ 76 and 94 to allow electric companies a reasonable opportunity to recover net, non-mitigable stranded costs associated with commitments previously incurred pursuant to their legal obligations to provide electric service. Id. at 29. See also D.P.U. 96-100 May 1 Statement at 53. The Department concluded that such

a policy would be in the public interest because such recovery would (1) ensure the provision of sound electric services during the transition to competition; (2) affirm the reliability of commitments, which is an essential element in any future industry structure; (3) promote federal and state coordination and ensure equal treatment of similarly-situated utilities; and (4) avoid costly, reform-delaying litigation. D.P.U. 95-30, at 35-36.

In our May 1 Statement, the Department asked commenters to address the claims for stranded cost recovery in terms of the type of interest asserted and the basis for the claim, with particular attention to any relevant state or federal law. In the discussion below, we address the threshold issue of our authority to allow retail access -- that is, access by competitive suppliers to electric company retail customers, which is the trigger for the electric companies' claims of stranded costs. The Department then analyzes the basis for recovery of stranded costs. We analyze in turn the legal claims for recovery of stranded costs, Department precedent, the claims for recovery of a specific category of stranded costs, *i.e.*, purchased power agreements, the policy grounds for recovery, and finally, our standard of review for stranded cost claims.

2. Department Authority to Order Retail Access

a. Introduction

The Department's objective in restructuring is to reduce the costs of electricity to all consumers by subjecting electric companies to the forces of competition rather than traditional cost-of service regulation. Competition among suppliers of electricity is possible only through the creation of open, non-discriminatory access to transmission and distribution systems. The electric companies' claims of stranded costs arise only if electric companies are required to provide open access to their distribution wires and, by extension, their captive customers. That is, stranded

costs could result from an electric company's inability to recover its fixed obligations in rates as the exclusive supplier to customers within that electric company's franchise territory. Thus, as a threshold issue to stranded cost recovery, we discuss our authority to order open access to the distribution systems of electric companies.

b. Issues Raised

The electric companies argued that G.L. c. 164 provides neither implied nor express authority for the Department to order an electric company to provide open access over their distribution systems (COM/Electric August 2, 1996 Comments at 7; FG&E August 2, 1996 Comments at 11; MECo February 16, 1996 Legal Commentary at 3). They argued that G.L. c. 164 envisions a comprehensive regulatory framework in which electric companies have unique public service obligations and are protected from the uncertainties of the competitive market (MECo February 16 Legal Commentary at 4, citing Commonwealth Electric Co. v. Department of Public Utilities, 397 Mass. 361, 368 n.4 (1986); EECco August 2, 1996 Comments, citing Weld v. Gas & Electric Light Comm'rs, 197 Mass. 556, 558 (1908); FG&E August 2, 1996 Comments at 12).

The electric companies buttressed their argument regarding the Department's lack of authority to order retail access by citing provisions of G.L. c. 164 that they consider inconsistent with retail access. For example, MECco argued that the requirement that electric companies conduct long-range forecast and supply plans under G.L. c. 164, § 69I would not make sense if electric companies did not know who their customers would be in the future (MECo February 16, 1996 Legal Commentary at 5; see also COM/Electric August 2, 1996 Comments at 7-8). Other examples cited by the electric companies are the requirement that electric companies file

electricity prices with the Department under Section 94 (COM/Electric August 2, 1996 Comments at 7-8; FG&E August 2, 1996 Comments at 13), and the Department's limited authority to eliminate or change franchises under Sections 21, 87, and 88 (MECo February 16, 1996 Legal Commentary at 5-6).

MECo also argued that even if the Department had authority to order retail access, under the Federal Power Act, a public utility may not provide third-party access without first filing a retail wheeling contract or tariff with FERC (MECo February 16, 1996 Legal Commentary at 5-6, citing Promoting Wholesale Access Through Open Access Non-Discriminatory Transmission Service by Public Utilities, FERC ¶ 32,514, at 33,144 (1995)). According to MECo, the Department lacks authority to order electric companies to file contracts or tariffs with FERC (id. at 7, citing Commonwealth of Massachusetts, Department of Public Utilities v. United States, 729 F.2d 886 (1st Cir. 1984)). Thus, MECo argued that open access can occur only if an electric company volunteers to file such a contract or tariff with FERC.

The counter argument is that the Department has broad rulemaking authority consistent with G.L. c. 164 (CPC August 2, 1996 Comments, App. at 6). CPC argued that the Supreme Judicial Court recently found that the Department's ratemaking authority was sufficient to allow greater competition in the natural gas market (id., citing Massachusetts Oilheat Council v. Department of Public Utilities, 418 Mass. 798, 805 (1994) (where the Court stated that the Department "has used the discretion granted it under the statute to promote the policy of increased competition in the energy market")). According to CPC, the Department's rulemaking authority would extend to ordering retail competition (id. at 7).

c. Current Department Proposal

As we noted in D.P.U. 95-30, Appendix B, the Department, pursuant to statute, comprehensively regulates the operations of electric utility companies in Massachusetts. In exchange for compliance with this comprehensive statutory scheme and regulations promulgated by the Department under that scheme, investor-owned electric companies contend that they receive an exclusive retail franchise, free from retail competition. See Commonwealth Electric Company v. Department of Public Utilities, 397 Mass. 361, 368-369 (1986), cert. denied, 481 U.S. 1036 (1986) ("In return for its shelter from the uncertainties of the competitive marketplace, the public utility assumes the responsibility to provide adequate service at reasonable rates"). We conclude, however, that the existing statutory scheme is not limited in application to a monopoly framework, but actually contemplates competition within an electric company's service territory, as envisioned by our proposal.

Particular sections of G.L. c. 164 relate to the nature of franchise territories. For example, Section 21 prohibits any regulated utility from transferring its franchise or contracting with any person to perform its duties under the franchise without legislative authority. Section 30 authorizes the Department to permit an electric utility to conduct business in towns and cities other than those named in its charter. Sections 87 through 91 establish the process by which an electric utility may gain consent from a municipality to serve customers within that municipality, even though another utility may already be supplying electricity there. While Section 21 helps to enforce the obligation to serve and leads to claims of an exclusive franchise, it is a restriction placed on the electric company and not on the Department. Moreover, Section 21 must be read in connection with other sections to determine the nature of the franchise. Rather than codifying perpetual exclusive utility franchises, the other sections cited set rules by which electric utilities

may compete and be subjected to competition in both their own and other service territories. These sections suggest that the state has retained authority to permit competition in franchise territories at any time.

Further, Department precedent supports the Department's authority to order retail access. In Ecological Fibers, Inc., D.P.U. 85-71 (1985), the Department allowed an electric company to serve a customer in a bordering service territory where the electric company in whose territory the customer resided did not establish that it had an exclusive right to serve customers in that territory and where the Department determined the arrangement was in the public interest. In Foley, D.P.U. 86-45/86-144 (1987), the Department found that both Boston Edison Company and the Wellesley Board of Public Works ("Wellesley") were authorized to serve a customer located in Needham, and ordered Wellesley to serve that customer.

The Department also finds support in our existing regulations for authority to order access to the distribution wires. Our regulations set forth an electric company's obligation to wheel the power of a qualifying facility.

Each utility must, at the request of a qualifying facility located within the Commonwealth, provide wheeling services for that qualifying facility, for the term of its power sales contract entered into pursuant to [220 C.M.R. §§ 8.00 et seq.], to transmit power generated by that qualifying facility to the transmission and distribution facilities of any other utility or nonregulated electric utility ... interconnected with the utility.

220 C.M.R. § 8.03(5)(b).

Nonetheless, there is no clear case or statutory provision on point. While we believe that the Department has authority to order retail access, we acknowledge that a challenge to our authority would delay the benefits of competition to consumers. Therefore, in our Legislative

Proposal, we seek endorsement of our authority to order retail access (see Appendix B, Legislative Proposal, SECTION 10).

Finally, assuming the Department does have authority to order retail access, and in light of the FERC's issuance of a final rule in FERC Order 888, adoption of retail access would no longer be a matter of voluntary compliance. As FERC has stated, the rates, terms, and conditions of all unbundled transmission service in interstate commerce will be subject to a FERC-authorized tariff. FERC Order 888, at 158. Further, FERC has stated that it is irrelevant to its jurisdiction whether the customer receiving the unbundled transmission service in interstate commerce is a wholesale or retail customer. Id. at 157. "Thus, if a public utility voluntarily offers unbundled retail access in interstate commerce or a state retail access program results in unbundled retail access in interstate commerce by a public utility, the affected retail customer must obtain its unbundled transmission service under a non-discriminatory transmission tariff with the FERC." Id. (emphasis in original). FERC has ordered that any public utility that owns, controls or operates facilities used for the transmission of electric energy in interstate commerce must file with FERC a non-discriminatory open access transmission tariff. 18 C.F.R. § 35.28(c).

3. Legal Claim of Entitlement to Stranded Cost Recovery

a. Introduction

Notwithstanding the Department's principle in D.P.U. 95-30 that we would allow a reasonable opportunity for stranded cost recovery on policy grounds, electric companies have continued to claim that they are legally entitled to full recovery of stranded costs. Their claim to a right to recovery as a matter of law is based on franchise rights, the obligation to serve, and the

existence of an asserted "regulatory compact"¹⁶³ with the Department. If restructuring results in stranded costs, electric companies argue that they are entitled to full recovery of such costs under state and federal Constitutional provisions that proscribe the taking of private property without just compensation (see COM/Electric August 2, 1996 Comments at 2, 15-16, 25-30; FG&E August 2, 1996 Comments at 19; EEC Co August 2, 1996 Comments at 2; MECo February 16, 1996 Legal Commentary at 3, 10, 29; WMECo August 2, 1996 Comments at 10).

The counterarguments asserted that whatever franchise rights and obligations the electric companies have operated under are subject to change and that either the regulatory compact is an illusion, or that it does not create compensable rights. Commenters also argue that electric companies are not entitled to insurance against the risk that market conditions may not permit full recovery of past investments, and that regulatory change does not necessarily give rise to a taking (see, e.g., Attorney General May 24, 1996 Comments at 4-6; Freedom Energy April 12, 1996 Comments, App. A; D.P.U. 95-30, DOER May 26, 1995 Comments, App. B at 4).

The Department's initial assessment of the electric companies' claim to stranded recovery in D.P.U. 95-30 was that the electric companies had not demonstrated a clear legal entitlement to recovery of stranded costs. Here, based on our review of the comments and our analysis of judicial and Department precedent, we evaluate their claim in more detail.

b. Analysis

¹⁶³ This "regulatory compact" appears to consist of statutes, case law, Department Orders, and a general course of conduct and understanding developed during the history of the electric companies in Massachusetts.

The Takings Clause of the Fifth Amendment of the United States Constitution¹⁶⁴ prohibits the government from taking private property for public use without just compensation. Under the Fourteenth Amendment, the Takings Clause applies to states. In addition, the Massachusetts Constitution, Part I, Art. 10, prohibits the taking of private property by the State without just compensation. The touchstone of this analysis is "fairness". The Supreme Court has emphasized that the Takings Clause acts "to bar Government from forcing some people alone to bear public burdens which, in all fairness and justice, should be borne by the public as a whole." Armstrong v. United States, 364 U.S. 40, 49 (1960). The analysis itself is a fact-specific inquiry, based on certain broad considerations that have been developed under what has been termed the "Penn Central" test.

The concept of a "taking" within the meaning of the Fifth Amendment defies precise definition. Indeed, the Supreme Court has "eschewed the development of any set formula" for determining which property-right infringements constitute compensable takings, relying "instead on ad hoc, factual inquiries into the circumstances of each particular case." Connolly v. Pension Benefit Guar. Corp., 475 U.S. 211, 224 (1986). Three factors that rank paramount in this inquiry are (1) the regulation's "economic impact" on the property owner, (2) the extent to which the regulation interferes with "distinct investment-backed expectations," and (3) the "character" of the interference, that is, whether the governmental action is more akin to a physical invasion or to a necessary readjustment of economic benefits and burdens. Penn Cent. Transp. Co. v. New York City, 438 U.S. 104 (1978); accord Connolly, 475 U.S. at 225; ... the court has identified two discrete categories of regulatory takings that, if left uncompensated, constitute unconstitutional takings per se. These categories, which need no "case-specific inquiry into the public interest ... are (1) permanent physical invasions and (2) regulations which den[y] all economically beneficial or productive use of land." Lucas, --- U.S. at ---, 112 S.Ct. at 2893.

¹⁶⁴

The Fifth Amendment provides "...nor shall private property be taken for public use, without just compensation."

McAndrews v. Fleet Bank of Massachusetts, N.A., 989 F.2d 13, 18 n.7 (1st Cir. 1993).¹⁶⁵

The Supreme Court has addressed takings in three categories: physical invasions of property ("physical takings"), regulatory takings and confiscatory ratesettings. The electric companies have claimed that the Department's proposed restructuring would result in a taking under each of these analyses. According to the electric companies, a taking would occur through (1) the requirement to provide access to their distribution wires to third parties and (2) the violation, via this access, of what they assert are current utility rights to recovery of investments plus a return from their ratepayers under franchises and the regulatory compact. Such a taking would require compensation in the form of stranded cost payments (see, e.g., EEC_o August 2, 1996 Comments at 23-24; MEC_o February 16, 1996 Legal Commentary; FG&E August 2, 1996 Comments at 36). The proposed restructuring, which involves the deregulation of generation, presents a case of first impression under the Takings Clause. See J. Gregory Sidak and Daniel F. Spulber, Deregulatory Takings and the Regulatory Contract, American Enterprise Institute for Public Policy Research 94 (February 15, 1996). The Supreme Court has never directly addressed the question raised by the electric companies: does a restructuring of the electric industry which eliminates the monopoly provision of generation in favor of a competitive generation market create a taking requiring compensation? In our analysis, we apply the relevant precedent from the Court's treatment of the above three categories of takings and conclude that the electric

¹⁶⁵ Massachusetts case law on takings generally follows Supreme Court jurisprudence. Steinbergh v. City of Cambridge, 413 Mass. 736, 738 (1992), cert denied, 113 S. Ct. 2358 (1993).

companies have not demonstrated that restructuring would amount to a taking (physical or otherwise) requiring either compensation or a certain level of compensation, under law.

i. Claim of a Physical Taking

The classic paradigm of a taking is the physical occupation or invasion of private property authorized by the government, whether for its own use or for a third party's. The Supreme Court has held that "[a] permanent physical occupation authorized by government is a taking without regard to the public interests that it may serve." Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. 419, 426 (1982) (the taking in Loretto involved the placement of a cable line on an apartment building, pursuant to a New York statute that required landlords to permit cable installations for their tenants at rates set by a state commission. The Court held that the presence of the cable was a permanent physical occupation of the owner's property and therefore a taking that required just compensation).

Loretto established the rule that a permanent physical occupation of private property, however minimal, results in a per se taking which is compensable; such an occupation effectively destroys each of the protected property rights, which are the rights to possess, use and dispose of the property, including the right to exclude others from the property. Loretto, 458 U.S. at 435. The extent of the occupation is not relevant. While the Loretto court referenced the three-part Penn Central test of a regulatory taking, it stated that a permanent physical occupation is a taking without regard to the other factors in the analysis, including the public interests served. 458 U.S. at 426, 432, 434-435. The Court distinguished between a permanent physical occupation, a physical invasion short of an occupation, and a regulation that restricts the use of property; the latter two are subject to the Penn Central balancing test. Loretto, 458 U.S. at 430, 432. What

distinguishes a permanent physical occupation from an invasion is permanence and exclusivity: the former absolutely dispossesses the owner of the rights to use and exclude others from the property. Loretto, 458 U.S. at 435, n.12.

Commenters have taken two positions. Some commenters have argued that access to distribution wires amounts to a permanent physical occupation of private property because electric companies would no longer have the right to exclude others from their wires and would be required to allow competitors to occupy a portion of the wires with their power. Under this argument, such access would constitute a physical per se taking requiring compensation, including severance damages for resultant losses in the value of utility generation displaced by this access. Electric companies asserted that ownership and control of the wires, including the right to exclude others, is the "backbone" of their franchise (see, e.g., MECo February 16, 1996 Legal Commentary at 13-18, citing Greater Worcester Cablevision, Inc. v. Carabetta Enterprises, Inc., 682 F. Supp. 1244, 1248 (D. Mass. 1985), Kaiser Aetna v. U.S., 444 U.S. 164 (1979); FG&E August 2, 1996 Comments at 37-39, citing Loretto; EEC Co August 2, 1996 Comments at 29-32, citing Loretto, GTE Northwest v. PUC, 900 P.2d 495, 503 (Or. 1995) (public utility commission required a local exchange carrier to provide collocation of equipment, software and databases)).

Other commenters have challenged these claims, asserting that the electric companies have only limited rights in their distribution wires. This counterargument recognized that the equipment, including the wires, is the property of the electric company, but noted that the utility's rights in this property have always been subject to government control (see, e.g., Attorney General August 8, 1996 Comments, App. A at 3-4, citing cases involving local control of public ways where electric companies were found to have no property rights, even if local action

destroyed utility property). Furthermore, as a practical matter, some commenters asserted that electric companies do not have exclusive rights to the wires now, because the companies' distribution wires currently carry electricity from many sources and are subject to pooling agreements (see, e.g., Attorney General August 8, 1996 Comments, App. A at n.15; Freedom Energy April 12, 1996 Comments, App. A at 13-14, citing Pruneyard Shopping Center v. Robins, 447 U.S. 74 (1980)).

According to this argument, electric companies have failed to meet the test of a physical taking, because they have not shown that access to the distribution wires would destroy their rights to "possess, use and dispose of" the wires (Attorney General August 8, 1996 Comments, App. A at 5; Freedom Energy April 12, 1996 Comments, App. A at 13-15). Under this analysis, the electric companies maintain their ability to use and control the wires, which depends on their performance in the market; at most, others' use of the wires would be transitory, and there would be no permanent physical occupation such as the installations in the Loretto and GTE cases.

Finally, the claim that a physical taking of the wires would create a right to damages for stranded generation assets was challenged on the grounds that (1) compensation for lost monopoly profits, i.e., stranded generation assets, is not appropriate, even if a taking is found, and (2) the electric companies will continue to have access to the wires to sell their power (Freedom Energy April 12, 1996 Comments, App. A, at 14; Attorney General August 8, 1996 Comments, App. A).

As the starting point in our analysis, we note that, in the current regulatory scheme, an electric company that owns and operates distribution wires holds them as private property.

United Electric Light Co. v. Deliso Construction Co., 315 Mass. 313, 316 (1943). At the same

time, these electric company rights are subject to grants of permission and regulation by the Department and from local officials. See G.L. c. 164, § 75; c. 166, §§ 21, 22.

Under the Department's restructuring proposal, access to electric company distribution wires is inextricably linked to implementation of a competitive generation market, which requires that entities other than monopolies have access to distribution lines in order to provide customers with alternative sources of power. The electric companies are correct that the proposed open access would be mandatory, a key element in takings analysis. However, the analogy drawn by the electric companies to the takings in Loretto and GTE does not support their claim. The electric companies have not demonstrated that they currently possess exclusive rights to use or occupy the distribution wires or that requiring open access to those wires would result in a permanent physical occupation.

In Loretto and GTE, regulations required that owners allow physical installation of equipment on their property. Because of the nature of the transmission and distribution of electricity, which is anything but fixed, the electric companies cannot demonstrate that currently the only electrons that flow over their wires are theirs, and that only they use and possess the wires. See, e.g., 220 C.M.R. § 8.03(5) (requiring electric companies to provide wheeling services to qualifying facilities at the qualifying facilities' request for the term of the facilities' power sales contract, in order to transmit power generated by a facility to the transmission and distribution facilities of any other utility or nonregulated electric utility interconnected with the electric company). Furthermore, the access that would be required in the restructured electric industry would be transitory, creating at most a temporary physical invasion rather than a permanent occupation. Electric companies could continue to use, occupy, and dispose of the wires subject

to any applicable regulation. Moreover, electric companies would derive fair compensation for use pursuant to federal and state rates for transmission and distribution. Under the Department's proposal, electric distribution companies would also have the exclusive right to provide distribution service in their service territories through a transition period (see Section VI, above). Finally, the Department notes that the real interest at stake for the electric companies appears to be the loss of what one company characterized as the "backbone" of their franchises, i.e., the exclusive service territory and captive customers from whom the electric companies currently recover costs plus a return. The companies, however, do not have a property right in their customers or a right to a monopoly.¹⁶⁶ For the above reasons, the Department concludes that the electric companies' claims to a physical taking are unpersuasive. Any alternative claims of a regulatory taking of the wires would have to be assessed under the Penn Central balancing test.¹⁶⁷

ii. Claim of a Regulatory Taking

¹⁶⁶ The Department notes that the New York Supreme Court, in a recent decision addressing a challenge to the restructuring proposal of the New York Public Utility Commission, held that state and federal antitrust laws and state utility non-discrimination regulations prohibit utilities from denying competitors use of their distribution facilities in order to maintain monopolies. See Energy Assoc. of New York State et. al. v. Public Service Commission of the State of New York, Index No. 5830-96, N.Y. Sup. Ct., County of Albany (Nov. 25, 1996).

¹⁶⁷ Regarding the argument that, if there were a physical taking, the electric companies would be entitled to the value of generation assets stranded by open access, the Department disagrees. Assuming arguendo such a physical taking, the electric companies would be entitled to just compensation for the use of the wires; under the restructuring proposal, electric companies would be compensated at distribution rates that were just and reasonable, under tariffs. Any compensation they claim above such rates goes to the larger issue of recovery for specific generation assets and should be resolved under an analysis of those claims.

Electric companies also asserted that restructuring would result in a regulatory taking that gives rise to a claim for stranded costs. 'This claim is premised on the electric companies' franchise rights and a characterization of the almost 100-year history of cost-of-service regulation as a regulatory compact. Electric companies argued that they have made significant investments pursuant to statutory and regulatory requirements under a monopoly scheme affirmed by the courts and the Department, with the expectation that the Department would allow them to fully recover prudently incurred investments plus a reasonable rate of return from ratepayers in the companies' service territories. All of the costs now claimed as stranded costs are being recovered over time in the rates currently being charged by each electric company, after approval by the Department or other regulators as just and reasonable expenses. The companies claimed that denial of full recovery of the investments plus a return during restructuring would be a regulatory taking (see, e.g., FG&E August 2, 1996 Comments at 40; MECo February 16, 1996 Legal Commentary).

The terms of any franchise and the history of utility regulation that underlies the claim of a regulatory compact are only two of several factors that must be evaluated under the Penn Central standard for a regulatory taking, which considers (1) the character of the government action, (2) the economic impact of the regulation (or, in this case, the deregulation) on the claimant, and (3) the extent to which the regulation has interfered with distinct investment-backed expectations. Penn Central Transport. Co. v. New York City, 438 U.S. 104, 124 (1978); McAndrews v. Fleet Bank of Massachusetts, N.A., 989 F.2d 13, 18 (1st Cir. 1993).

The first element, the character of the government action, focuses on whether the government action is more like a physical invasion, or a necessary readjustment of economic

benefits and burdens. The government action in the proposed restructuring of the electric industry would make the supply of generation competitive and open service territories to competitors; by its terms, restructuring reallocates risks and benefits. See D.P.U. 95-30, at 35. This readjustment is consistent with and premised on the mandate of the Department to regulate the electric industry in the public interest, and to ensure that consumers receive service at just and reasonable rates.

In our investigation into restructuring, the Department has determined that the public interest would be better served through a system of open competition in generation rather than a continuation of the vertically-integrated, regulated monopoly system. D.P.U. 95-30, at 2, 13. Restructuring is a major evolutionary step in a series of Department investigations and decisions setting out the Department's broad authority to promote customer choice and facilitating such choice. See Investigation into Ratemaking Treatment for New Generation Facilities, D.P.U. 86-36-A (1989); Gas Transportation Rates, D.P.U. 85-178 (1987) (facilitating customer choice of supplier in the natural gas industry); Incentive Regulation, D.P.U. 94-158, at 42-43 (1995); see also Boston Gas Company v. Somerville, 420 Mass. 702, 704 (1995); Boston Real Estate Board v. Department of Public Utilities, 334 Mass. 477, 484-485 (1956); Massachusetts Oil Heat Council v. Department of Public Utilities, 418 Mass. 798 (1994), where the Supreme Judicial Court cited "the discretion granted [to the Department] under [G.L. c. 164, § 94] to promote the policy of increased competition in the energy market." As the Department noted in D.P.U. 95-30, "the development and implementation of [the Department's] pro-competitive policies have been gradual, measured and consistent, in order to avoid the risks of arbitrary switching warned about

in Duquesne."¹⁶⁸ D.P.U. 95-30, App. B at 11. The proposed restructuring represents a carefully considered change in the way that electric service will be provided, not the type of expedient change in regulation criticized in Duquesne. The courts have recognized that, although government regulations often impair the value of individuals' property, the government is entitled to regulate a wide spectrum of economic activity for the public good; although a change in regulation creates winners and losers, requiring compensation in all such cases would effectively destroy the ability to regulate. See Andrus v. Allard, 444 U.S. 51, 65 (1979).

The Department acknowledges that creation of a competitive, unregulated generation sector will adjust the risks and benefits in the industry and create new risks and opportunities for both consumers and electric companies. The extent of those impacts and the allocation of the risks of those changes are issues under the other two elements of the Penn Central test.

Regarding the second element of the Penn Central test, economic impact, the Court has found a taking based solely on economic impact only where a regulation destroys any economically beneficial or productive use of property; this is the economic equivalent of a physical occupation. See Lucas v. South Carolina Coastal Council, 505 U.S. 1003, 1029 (1992). However, a reduction in the value of property because of regulation is not necessarily a taking, Andrus v. Allard, 444 U.S. at 64-66 (prohibition of sale of lawfully-acquired eagle feathers by subsequent legislation eliminates only one of a bundle of property rights, albeit the most profitable one, and is not dispositive on taking), even when the reduction in value may be significant, see Concrete Pipe & Products of California, Inc. v. Construction Laborers Trust for

¹⁶⁸ Duquesne Light Company v. Barasch, 488 U.S. 299 (1989).

Southern California, 508 U.S. 603, 645 (1993) (Court holds that "mere diminution in the value of property, however serious, is insufficient to demonstrate a taking," citing cases which involved regulation affecting between 75 percent and 92 percent of the value of the property, which were not held to be takings), or when the regulation disregards or destroys existing contract rights. See Connolly v. Pension Benefit Guaranty Corporation, 475 U.S. 211, 224 (1986). In addition, courts will take into account the potential for mitigation of any adverse economic impact. See Connolly, 475 U.S. at 225-227.

The economic impact of restructuring is unknown and disputed. Electric companies in Massachusetts have asserted that open access will deprive them of their current recovery of the costs of prudent generation investments as well as a reasonable rate of return, at a total estimated value of billions of dollars (e.g., there are estimates as high as \$12.5 billion, see Freedom Energy April 12, 1996 Comments at 2; see also COM/Electric August 2, 1996 Comments at 3; FG&E August 2, 1996 Comments at 42; MECo February 16, 1996 Legal Commentary at 2). According to the electric companies, this impact would be confiscatory and, depending on the circumstances of individual electric companies, could result in financial instability, or even bankruptcy. However, other commenters have offered analyses disputing the electric companies' figures, characterizing them not as probable values but rather as a theoretical worst-case scenario. They argue that there is no reliable evidence of a significant economic loss, and that, in fact, any stranded costs could be offset by gains for electric companies under competition (see e.g., Freedom Energy May 24, 1996 Comments at 3; Attorney General April 18, 1996 Comments, and attached report, Resource Insight, Inc., "Estimation of Market Value, Stranded Investment, and Restructuring Gains" (April 17, 1996)).

It is the current disparity between the market price of generation and the embedded costs of utility generation or purchased power agreements that could create most of the stranded costs in a competitive generation market. However, this disparity is caused by and subject to many variables, so that the existence and magnitude of this exposure are speculative. Whether this disparity will continue depends on such factors as the market price of generation; the electric companies' ability to successfully market their services, which can depend on several elements besides price, such as the quality of customer service; divestiture; the need for capacity; and, most importantly, aggressive mitigation. In addition, the economic impact of restructuring is likely to vary among electric companies, depending on each electric company's mix of generating sources and the extent and success of its efforts to reduce stranded cost exposure. It may be problematic to use the current market as a point of reference for the competitive market, since the current market reflects only short-term energy sales supported by base rate treatment of fixed costs. In the competitive market we envision, pricing behavior is likely to change.

Furthermore, the uncertainty of the economic impact of restructuring is increased, and the severity of any impact is likely to be reduced, by the fact that electric companies will enter a restructured, competitive electric industry with certain advantages: substantial physical assets including plant, equipment, and sites acquired over the monopoly period, and largely financed by ratepayers; and, in some cases, intangible assets, such as name recognition and customer loyalty. The electric companies will retain these assets in an unregulated environment, and, to the extent that electric companies participate in the generation sector, they will have an opportunity they do not have now: to market their generation to customers outside their traditional service territories and to sell at market-based rates. As providers of competitive generation services, they will not

be subject to the current obligation to ensure long-term supplies for all customers in a service territory, or to a number of other regulatory requirements currently imposed on vertically-integrated electric companies.

The electric companies have not disputed the potential impact of such variables, and most electric companies have indicated their willingness to mitigate their stranded cost claims and to subject stranded cost recovery to some form of reconciliation. The claims of adverse economic impact that have been advanced by the electric companies are thus more speculative than those recognized by courts as satisfying the economic element of the Penn Central test and, in any event, would have to be evaluated company by company. Compare United States v. Winstar Corp., 135 L.Ed.2d 954, 1012-1013 (1996) (impacts of change in government regulation were immediate seizure and liquidation of companies and need for recapitalization).

The third and final element of a regulatory takings analysis under the Penn Central test is the interference of a regulation with distinct investor expectations. The basis of the investor expectations, the extent of regulation of the industry, the explicit allocation of risk of regulatory change, and the reasonableness of the expectations are all factors that the courts have taken into consideration under this element of the test.

The electric companies have asserted that their investments were made in reliance on the continued existence of the current regulatory scheme, and that this expectation was based on and encouraged by both explicit and implicit promises by the Department, in the form of franchise rights and the regulatory compact (see, e.g., MECo February 16, 1996 Legal Commentary at 23-28).

Regarding the issue of franchise rights, the Department notes that, while electric companies have asserted franchise rights as the basis of a legal claim for stranded cost recovery, they have not primarily relied on this claim, or demonstrated how the terms of their franchises support the claim. As our preliminary analysis of this issue in D.P.U. 95-30 indicated, the existence or absence of an exclusive franchise is not dispositive on the question of whether there is a regulatory taking. We noted in D.P.U. 95-30, Appendix B, that the operation of electric companies in Massachusetts is subject to comprehensive regulation by the Department. In exchange for compliance with this comprehensive statutory scheme and regulations promulgated by the Department under that scheme, investor-owned electric companies contend that they receive an exclusive retail franchise, free from retail competition. See e.g., Commonwealth Electric Company v. Department of Public Utilities, 397 Mass. 361, 368-369 n. 4 (1986), cert. denied, 481 U.S. 1036 (1986) ("In return for its shelter from the uncertainties of the competitive marketplace, the public utility assumes the responsibility to provide adequate service at reasonable rates"); Attorney General v. Haverhill Gas Light Company, 215 Mass. 394, 399 (1913) ("'[F]ranchise' means the right to manufacture and supply gas for a particular locality and to exercise the special rights and privileges in the streets and elsewhere which are essential to the proper performance of its public duty and the gain of its private emoluments and without which it could not exist successfully"); see also Delmarva Power & Light Company v. City of Seaford, 575 A.2d 1089 (Del.Supr. 1990) (utility franchise found not explicitly exclusive, but public service

commission's policy to restrict competition against pioneer utilities¹⁶⁹ found to warrant fair compensation from infringing municipal utility).

Sections of G.L. c. 164 that relate to the nature of franchise territories include G.L. c. 164, § 21, which prohibits any regulated utility from transferring its franchise or contracting with any person to perform its duties under the franchise without legislative authority; G.L. c. 164, § 30, which authorizes the Department to permit an electric utility to conduct business in towns and cities other than those named in its charter; and G.L. c. 164, §§ 87 through 91, which establish the process by which an electric utility may gain consent from a municipality to serve customers within that municipality, even though another utility may already be supplying electricity there.

At first examination, G.L. c. 164, § 21 appears to support one aspect of the regulatory compact: it prevents a utility from transferring its franchise to another person and thereby helps to enforce the obligation to serve. Rather than codifying perpetual exclusive utility franchises, the other sections cited set rules by which electric utilities may compete and be subjected to competition in both their own and other service territories. They also do not help to clarify the terms of utility franchises, but instead strongly suggest that the state has retained unrestricted authority to permit competition in franchise territories at any time (see Section VI. B.3, above). See also Weld v. Gas & Electric Light Commissioners, 197 Mass. 556, 557 (1908) (emphasizing the duty to exercise the franchise for the benefit of the public); compare Public Service Co. of New Hampshire v. N.H. Public Utilities Comm'n, 676 A. 2d 101 (N.H. 1996), in which the New

¹⁶⁹ A "pioneer utility" is the first to serve an area. The Department has no similar policy favoring pioneer electric companies over potential competitors.

Hampshire Supreme Court addressed the question of whether the New Hampshire Public Utility Commission, on a public good determination, had the statutory authority to permit retail competition within the franchise service territory of Public Service Company of New Hampshire ("PSNH"). PSNH had claimed that New Hampshire statutes were ambiguous and neither provided nor withheld authority from the PUC to grant competing franchises, and that this ambiguity must be resolved in favor of exclusivity because of an 80-year pattern of decisions that set up and enforced exclusive franchises. In reviewing New Hampshire law on franchises, the court found that, while both the courts and the PUC had stated that the monopoly status of public utility franchises was conditioned on "continued subservience to the public good," this amounted to a finding that, in theory, competing franchises could be granted, while in practice they were not. The court stated that "[w]hat was sound regulatory policy in 1930 may be anachronistic today," and that the monopoly system in place was subject to the PUC's authority and responsibility under New Hampshire law to grant a competing franchise where such grant would serve the public good.

The electric companies have also asserted a legal claim for stranded cost recovery based on the existence of a regulatory compact. In this claim, the electric companies have relied heavily on the Winstar case, in which three thrift savings institutions acquired failing savings and loan ("S&L") companies pursuant to written contracts with the federal government that explicitly guaranteed a certain accounting treatment of the acquired S&L assets. When subsequent legislation eliminated that treatment, the thrifts were faced with seizure and liquidation or the need to recapitalize. The Court held that the government's contracts with the thrifts were "not mere statements of then-current regulatory policy, but ... terms in an allocation of risk of

regulatory change that was essential to the contract ..." which rendered the government liable for breach of contract. United States v. Winstar Corp., 135 L.Ed 2d 954, 1012-1013 (1996).

In their argument for stranded cost recovery, the electric companies have not claimed that there is a contract like the one in Winstar that expressly delegates the risk of regulatory change to the ratepayers. However, they have asserted that the quid pro quo in the electric industry, in which private, investor-owned companies operated in exclusive service territories and invested in generation in exchange for a return of and on prudent investments, was reaffirmed throughout the history of the industry and is tantamount to a contract promise (see e.g., FG&E August 2, 1996 Comments at 18-25, 42-43 (examples of electric companies' "reasonable expectations" of a right to recovery of investments and a return)).

The utility expectations are not the result of explicit promises to insulate them against the risk of regulatory change, which is always present in a highly-regulated industry. Furthermore, the regulatory scheme, including the transition to competition in generation, is intended to benefit consumers; the method to achieve this is necessarily subject to change. See, e.g., Connolly v. Pension Benefit Guaranty Corp., 475 U.S. 211, 223-227 (1986) (1980 amendments imposed additional pension liability on employers beyond contract obligations. The Court held that this was not a taking. Given the government power to regulate in an area subject to extensive government control, even legislation that upsets expectations or destroys contract rights is not necessarily a taking; any investor expectations had to take into account the prospect of a change in regulation); McAndrews v. Fleet Bank of Massachusetts, N.A., 989 F.2d at 18-20. The Court in Winstar emphasized that, given the financial exposure and the potential for regulatory change in the highly regulated banking industry, the regulatory treatment promised in the contract was a

distinct investor expectation backed by an express allocation of the risk of regulatory change to the government and assurance to the investors. It is this express contract allocation of risk that distinguishes the Winstar claim from the electric companies'. The electric companies have claimed more generally that they invested in plant, entered into long-term contracts and carried regulatory assets pursuant to regulators' directives and approvals, with the expectation that the costs of these commitments would be recovered in rates over time. However, this claim is not sufficient to create an interest protected under the Takings Clause, given the risks of regulatory change and the considerable discretion of regulators to amend a regulatory scheme in the public interest, even where this creates burdens for some parties.

Based on our analysis, the Department concludes that the electric companies have not demonstrated that the introduction of retail customer choice in the generation market would constitute a regulatory taking of utility property in violation of the Fifth and Fourteenth Amendments of the U.S. Constitution, requiring compensation as a matter of law.

iii. Claim of Confiscatory Ratesetting

A third line of Takings Clause cases specifically addresses whether ratesetting practices by PUCs are confiscatory. Both the United States Constitution and the Massachusetts Constitution protect property rights of regulated electric utilities. Rates for regulated electric utilities must be designed to raise revenue that is sufficient to recover their costs, raise capital necessary to the discharge of their public duties, and otherwise assure confidence in the financial integrity of the enterprise. Duquesne Light Company v. Barasch, 488 U.S. 299, 307 (1989); FPC v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944); Bluefield Water Works & Improvement Co. v. PSC, 262 U.S. 679, 692-693 (1923). See also Boston Edison Co. v. Dept. of Pub. Utilities, 375 Mass.

1, 10, cert. denied, 439 U.S. 921 (1978). Utilities in this proceeding have claimed that, under this line of cases, rates that do not permit full recovery of all prudently incurred costs plus a return would jeopardize the companies' financial integrity and reliability of service. According to the companies, such consequences would amount to confiscation and violate the Takings Clause (see COM/Electric August 2, 1996 Comments at 19, 21; MECo February 16, 1996 Legal Commentary at 10-22; EECco August 2, 1996 Comments at 24-29; D.P.U. 95-30, May 26, 1995 Joint Legal Memorandum of BECo, COM/Electric and WMECo, at 16-20).

The Supreme Court has held that, while utility regulators have considerable discretion in choosing ratesetting methodologies, the net result cannot be confiscatory, under the standards of Hope, Bluefield and Duquesne. In addition, this line of takings cases has established several specific principles regarding utility property. The Supreme Court's analysis has distinguished property that is dedicated to a public purpose, such as utility property, from purely private property, and indicated that:

When one ... devotes his property to a use in which the public has an interest, he, in effect, grants to the public an interest in that use, and must submit to be controlled by the public for the common good, to the extent of the interest he has thus created. He may withdraw his grant by discontinuing the use; but, so long as he maintains the use, he must submit to the control.

Munn v. Illinois, 94 U.S. 113, 125-126 (1877). See also Duquesne, 488 U.S. at 307. This overarching public interest consideration is a critical factor in determining whether a PUC's ratesetting decisions violate the Takings Clause.

In its analysis, the Supreme Court has focused on the end result¹⁷⁰ of the regulation rather than the specific ratesetting methodology used by the PUC to reach that result. The end result must appropriately balance ratepayer and shareholder interests, and fall within the range of reasonableness. See generally Jersey Central Power & Light Co. v. FERC, 810 F.2d 1168, 1175 (D.C. Cir. 1987).

In FPC v. Hope Natural Gas Co., 320 U.S. 591, 602 (1944), the Supreme Court stated:

[I]t is the end result reached [in setting rates] not the method employed which is controlling. It is not theory but the impact of the rate order which counts. If the total effect of the rate order cannot be said to be unjust and unreasonable, judicial inquiry ... is at an end.

To determine whether the end result is reasonable requires a "balancing of ... investor and consumer interests." Id. at 603. In subsequent cases, the Court has reaffirmed the requirement to balance ratepayer and shareholder interests in order to achieve a just end result. The Court has emphasized that the costs incurred by investors are not dispositive in this analysis, but rather "only one of the variables in the constitutional calculus of reasonableness." Permian Basin Area Rate Cases, 390 U.S. 747, 769 (1968). In the Permian Basin case, the Court further stated that:

The Commission cannot confine its inquiries either to the computation of costs of service or to conjectures about the prospective responses of the market; it is instead obliged at each step of its regulatory process to assess the requirements of the broad public interests entrusted to its protection by Congress. Accordingly, the "end result" of the Commission's orders

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The "end result" test represented a shift in Supreme Court review of utility ratesetting away from the close judicial scrutiny of the "fair value" test under Smyth v. Ames, 169 U.S. 466 (1898). As part of a Takings Clause analysis, the "fair value" test had required that rates provide investors with the "fair value" of their property, which was held to be the contemporary market value. When the Supreme Court in Hope abandoned the "fair value" test as a requirement, it allowed PUCs considerable discretion in determining how to set rates, as long as the end result was just and reasonable.

must be measured as much by the success with which they protect those interests as by the effectiveness with which they "maintain credit and attract capital."

Id. at 791.

The Court has balanced these interests in a number of cases in which utilities have challenged rates as confiscatory, based on determinations which excluded certain costs from recovery, in some instances pursuant to state statutes. These cases have affirmed the ability of PUCs to disallow recovery for uneconomic assets in rates. In Duquesne Light Co. v. Barasch, 488 U.S. 299 (1989), the Court discussed the methods of valuing utility investments, its perspective on valuation requirements, and the relation of valuation to competitive markets. Duquesne Light Company had sought recovery for preliminary construction costs of several nuclear plants that had been cancelled. The PUC found that the incurrence of the costs was reasonable and prudent and, on that ground, allowed Duquesne to amortize and collect the construction costs over a ten-year period, despite the fact that the facilities were not in use and useful. A Pennsylvania statute enacted a month before the close of the rate proceeding prohibited the inclusion of construction costs in rate base or in rates until a facility was "used and useful in service to the public." On appeal, the state supreme court denied any recovery for the costs, which the utility challenged as confiscatory under the Takings Clause. The Supreme Court's analysis took into consideration the state's change in methodology and the impact of this change on the utility. It concluded that the state had been largely consistent over time in its rate methodology and that the impact of the statutory change on rate recovery was within a range of reasonableness. The Court cautioned that: "a State's decision to arbitrarily switch back and forth between methodologies in a way which required investors to bear the risks of bad investments at

some times while denying them the benefit of good investments at others would raise serious constitutional questions." Duquesne Light Co. v. Barasch, 488 U.S. at 315. At the same time, the Court held that "[t]he Constitution within broad limits leaves the States free to decide what ratesetting methodology best meets their needs in balancing the interests of the utility and the public." Id. at 316. Among the factors which the Court in Duquesne held that a PUC could take into account in calculating the value of utility assets for ratesetting was market prices. Id. at 316 n.10.

The Supreme Court has also held that regulators are not required to insulate utilities from the effect of market forces on their rates, even when their financial viability is threatened. In the seminal case of Market Street Railway Co. v. Railroad Commission of California, 324 U.S. 548 (1945), a regulated streetcar company asserted that a state commission order that reduced its fare would require it to operate at a loss and therefore violated the Takings Clause. In holding that there was no taking, the Court stated:

Without analyzing rate cases in detail, it may be safely generalized that the due process clause never has been held by this Court to require a commission to fix rates on the present reproduction value of something no one presently would want to reproduce, or on the historical valuation of a property whose history and current financial statements showed the value no longer to exist, or on an investment after it has vanished, even if once prudently made, or to maintain the credit of a concern whose securities are already impaired. The due process clause has been applied to prevent governmental destruction of existing economic values. It has not and cannot be applied to insure values or to restore values that have been lost by the operation of economic forces.

Id. at 567. See also Public Service Commission of Montana v. Great Northern Utilities Co., 289 U.S. 130, 135 (1933).

The above line of takings cases does not support the claim that electric companies are automatically entitled to a certain level of recovery in rates for the assets they have acquired to serve customers, even when those assets are prudently incurred. The focus of the analysis in these cases is on striking a reasonable balance between ratepayer and shareholder interests. The ratepayers' interest is in paying just and reasonable rates, which is also our goal as regulators. Restructuring is intended to benefit ratepayers, by making the advantages of a competitive generation market available to all customers. Costs above retail rates in a competitive market, including those for any stranded cost recovery, will reduce those benefits.

The interests of shareholders, as defined by Hope, are in a reasonable opportunity to earn a return of and on their prudent investments, commensurate with the returns of other businesses subject to corresponding risks and uncertainties. Both the opportunities and the risks faced by electric companies will change in restructuring. The competitive generation market will offer many opportunities to electric companies that they do not have under regulation. Their interest in reducing or eliminating the risk of non-recovery of above-market costs, and in locking in the current level of cost recovery and a return on investment, is not an interest that is constitutionally protected under this line of cases.

Based on our preceding analysis, the Department concludes that we are not required to ensure that electric companies continue to receive from ratepayers the same level of recovery of investments and return on those investments that they receive as regulated monopolies, or to insure the companies against possible losses in a competitive market. Rather, the Department's duty under this line of takings cases is to balance the interests of ratepayers and shareholders in

the new circumstances of a restructured electric industry, in order to achieve a fair result and set just and reasonable rates. We believe our proposal achieves this objective.¹⁷¹

c. Department Precedent

As another element in our analysis of the legal claims of the electric companies to stranded cost recovery, which is also relevant to the constitutional analysis above, we next address the impact of our regulatory precedent on the companies' claims. Under the existing regulatory framework, the Department must afford electric companies a reasonable opportunity to earn a return of and on their prudent investments commensurate with the returns of other businesses subject to corresponding risks and uncertainties. Massachusetts Electric Co. v. Department of Public Utilities, 376 Mass. 294, 299-300 (1978); Federal Power Commission v. Hope Natural Gas Co., 320 U.S. 591, 603 (1944). Because electric companies are subject to risks and uncertainties, even in a regulated system, the Department has consistently held that the recovery of prudently incurred costs is not guaranteed. Boston Edison Company, D.P.U. 906, at 158 (1982). Rather, the opportunity to recover such costs has been a function of the Department's allocation of risks and rewards between electric companies and ratepayers. Id.

¹⁷¹ Assuming arguendo that a court were to find that restructuring would result in a taking, the Department notes that the issue of just compensation would have to be resolved. In many of the Takings Clause cases, where courts have found a taking requiring just compensation, they have not reached the question of what constitutes just compensation. Instead, they have remanded this question for resolution. See, e.g., the remand in Loretto to the state court to determine the amount of compensation that was due. Loretto v. Teleprompter Manhattan CATV Corp., 458 U.S. at 441. Based on a finding that recovery of net, non-mitigable stranded costs is in the public interest, our restructuring proposal includes a method of calculating these costs and allows the companies a reasonable opportunity to recover them (see Section XI. E, below, and Model Rule 11.03(3)). Should a taking be found, this method of calculation could provide a way of determining just compensation.

In order to determine the proper allocation of risks and rewards in the traditional regulatory framework, the Department has established a standard which allows the recovery of prudently incurred costs and permitted a return on prudently incurred costs for plant that is actually used and economically useful, *i.e.*, a prudent/used and useful standard. Western Massachusetts Electric Company, D.P.U. 85-270 (1986). Under this standard, the Department reviews the prudence of an electric company's actions to determine if, based on all that it knew or should have known at the time, the company's actions were reasonable and prudent in light of the circumstances which then existed. Boston Edison Company, D.P.U. 906, at 165; Boston Gas Company, D.P.U. 93-60, at 24 (1995). Where the Department determines that the electric company's actions were reasonable and prudent, the costs associated with those actions generally qualify for recovery from ratepayers.

The Department then undertakes a "used and useful" analysis to determine the portion of prudently incurred costs on which the utility is entitled to earn a return. Boston Edison Company, D.P.U. 906, at 159 (1982); Western Massachusetts Electric Company, D.P.U. 85-270, at 25-27 (1986). Where the Department determines that prudently incurred costs have produced a used and useful investment, the cost of that investment is placed in the rate base upon which the company earns a return. D.P.U. 558, at 14. Cost recovery is not precluded by a finding that an investment is no longer used and useful. D.P.U. 906, at 159. Under the prudent/used and useful standard, the risk that prudent management decisions result in investments that are uneconomic in use is shared by ratepayers and shareholders. D.P.U. 86-36-C at 4 (1988).

As a general rule, the Department does not allow the relitigation of the prudence of an investment once it has been allowed in rate base. Berkshire Gas Company, D.P.U. 92-210-B

(1993); Boston Edison Company, D.P.U. 906, at 194. However, the Department does require electric companies to manage investments prudently on an ongoing basis. See Commonwealth Gas Company, D.P.U. 94-174-A (1995), citing Bay State Gas Company, D.P.U. 95-87, at 11 (1995) (Department found that contract approval does not terminate either a local distribution company's responsibility for supply decisions or the Department's oversight of those supply activities).

The Department does review plant previously included in rate base to determine whether it continues to be used or economically useful. Fitchburg Gas & Electric Light Company, D.P.U. 20279 (1980); Boston Edison Company, D.P.U. 18515 (1976); Fitchburg Gas & Electric Light Company, D.P.U. 18296/18297 (1975). In such cases, the Department has consistently excluded from rate base investments which are no longer used and useful. Boston Edison Company, D.P.U. 18515 (1976), affirmed, Boston Edison Company v. Department of Public Utilities, 375 Mass. 1, 20-21 (1978); Western Massachusetts Electric Company, D.P.U. 558, at 14 (1981). However, the Department has allowed the recovery of prudently incurred costs associated with investments excluded from rate base through amortization of the undepreciated balance as a cost-of-service line item. Fitchburg Gas & Electric Light Company, D.P.U. 19084 (1977) (generation plant excluded from rate base as representing excess capacity); Western Massachusetts Electric Company, D.P.U. 20279 (1980) (peaking units excluded from rate base as representing excess capacity); Boston Edison Company, D.P.U. 18515 (1976), affirmed, Boston Edison Company v. Department of Public Utilities, 375 Mass. 1, 20-21 (1978) (retired generation units and pollution control equipment excluded from rate base); Western Massachusetts Electric Company, D.P.U. 558 (1981) (cancellation of generation unit); Commonwealth Electric Company, D.P.U. 956

(1982) (cancellation of generation unit); Boston Edison Company, D.P.U. 906 (1982), affirmed, Attorney General v. Department of Public Utilities, 390 Mass. 208 (1983) (cancellation of generation unit); Fitchburg Gas & Electric Light Company, D.P.U. 84-145-A (1985) (cancellation of generation unit). The Department has not allowed amortization of the undepreciated balance of prudently incurred costs where the record did not contain information on the depreciation or operating expenses associated with the uneconomic asset. Western Massachusetts Electric Company, D.P.U. 18731, at 16-22 (1977); Lowell Gas Company, D.P.U. 19037/19037-A at 14-16 (1977).

Thus, the Department's policy with respect to the allocation of risk and reward associated with uneconomic assets¹⁷² protects shareholders against the loss of actual investment, but does not generally require ratepayers to provide a return on property not in use and useful. D.P.U. 558, at 14; D.P.U. 18031-A, affirmed, Fitchburg Gas & Electric Light Co. v. Department of Public Utilities, 371 Mass. 881, 886 (1977). The Supreme Judicial Court has affirmed this division of burdens between electric companies and ratepayers and has consistently held that it will defer to the Department's policy on cost recovery of abandoned and retired investment

¹⁷² The Department balances risk and reward in several regulatory contexts. For example, the Department has concluded that risk and reward are appropriately balanced if utilities bear the risks and enjoy the potential for reward associated with changes in the costs of construction and operation of new generation investments, including costs of capital. D.P.U. 86-36-C at 77-78 (1988). Ratepayers, in general, bear the risk of volatile fuel prices. Id. at 79; see G.L. c. 164, § 94G. Further, the Department has noted that the proper allocation of risks associated with decreased costs of energy alternatives should leave ratepayers no worse off than under the original pricing arrangement, and should give utilities adequate incentive to meet their obligations with the least-cost resource. D.P.U. 86-36-C at 83-84. In this way, when the costs of alternatives increased in the interim between contract preapproval proceedings, ratepayers received the full benefit of the lower costs associated with the preapproved option. Id.

provided that the exclusion of such investment from the rate base does not have a confiscatory effect. Attorney General v. Department of Public Utilities, 390 Mass. 208, 421-422 (1983); Boston Edison Company v. Department of Public Utilities, 375 Mass. 1, 20-21 (1978); Fitchburg Gas & Electric Light Co. v. Department of Public Utilities, 371 Mass. 881, 886-889 (1977).

4. Policy Grounds for Stranded Cost Recovery

Our investigation into restructuring has focused on "(1) how a restructuring of the electric industry in Massachusetts would promote competition and economic efficiency and expand opportunities that would benefit consumers, (2) whether and how to extend to some or all customers the option of choosing their own electricity suppliers, (3) how such a restructuring could be implemented, and (4) the appropriate regulatory mechanisms to apply to a restructured electric industry." D.P.U. 95-30, NOI at 1-2. Our conclusion in D.P.U. 95-30 was that "the interests of ratepayers would best be served by an expedient and orderly transition from regulation to competition in the generation sector, in order to bring to ratepayers the benefits of competition as soon as possible." Id. at ii. We identified recovery of stranded costs as one of the key issues in the transition to a competitive electricity market. Id.

In this rulemaking, we have determined that the electric companies have not established a clear legal entitlement to stranded cost recovery. At the same time, we acknowledge that the legal question of whether stranded costs are recoverable in the restructuring of the electric industry is one that PUCs and the courts have never addressed, let alone resolved. It continues to be our belief that litigation over stranded cost recovery would delay the introduction and benefits of competition for consumers. Furthermore, as a matter of sound public policy, the Department reaffirms that allowing electric companies a reasonable opportunity to recover

stranded costs is in the public interest because such recovery would (1) ensure the provision of sound electric services during the transition to competition; (2) affirm reliability of commitments, which is an essential element in any future industry structure; (3) promote federal and state coordination and ensure equal treatment of similarly-situated utilities; and (4) avoid costly, reform-delaying litigation. D.P.U. 95-30, at 35-36.¹⁷³

Absent stranded cost recovery, the electric companies have raised concerns about their ability to attract capital, honor debts, maintain sufficient revenues to ensure safe and reliable service and fully participate in a restructured industry. The companies have argued that, if the Department fails to honor existing commitments, the faith of the financial community in the future market and regulatory structures would be undermined, jeopardizing the ability of electric companies to borrow funds and increasing the cost of capital (see, e.g., COM/Electric August 2, 1996 Comments at 29). These are legitimate concerns which also have implications for ratepayers. The ability to maintain the current high quality of electric service is particularly important to a successful, orderly transition to a competitive generation market. Similarly, the reliability of commitments will be a key feature of the restructured electric industry, in which contracts for generation will play a major role. The Department reaffirms that "a structured transition that allows an appropriate measure of stranded cost recovery, rather than risking the

¹⁷³ The SJC has stated in a number of contexts that questions of policy are for an administrative agency. American Hoechst Corp. v. Department of Public Utilities, 379 Mass. 408, 411-412 (1980); see also School Comm. of Newton v. Labor Relations Comm'n, 388 Mass. 557, 573 (1983); Boston Edison Company v. Board of Assessors of Watertown, 387 Mass. 298, 302 (1982); Massachusetts Electric Company v. Department of Public Utilities, 376 Mass. 294, 302, 381 (1978).

abrogation of existing commitments, would be in the public interest, because it would ensure the provision of sound electric services during the transition." D.P.U. 95-30, at 35.

We also acknowledge the need to coordinate our policy on stranded cost recovery with the policies of other state and federal authorities. The FERC has established a policy providing for full recovery of all legitimate, verifiable and prudent wholesale stranded costs, consistent with a utility's reasonable expectations and the justness and reasonableness of the underlying contract; it reserves to the states, at least in the first instance, the authority to deal with stranded costs created by retail wheeling. FERC Order 888 at 17-18. Our sister states in New England have also provided for some measure of stranded cost recovery.¹⁷⁴

Our policy to allow recovery of net, non-mitigable stranded costs recognizes the obligation to serve that electric companies historically faced under traditional cost-of-service regulation. It also acknowledges the interests of the electric companies' shareholders in recognition of their investments to meet this obligation. At the same time, these interests must be balanced against the interests of ratepayers in just and reasonable rates; ratepayers should not have to bear a disproportionate burden in this regulatory change. The key to balancing these interests and creating a fair policy on stranded cost recovery is mitigation. The electric companies and the parties to contracts for generation will play the critical role in mitigating stranded costs; ratepayers must rely on them to reduce these costs. The rates that would result from a complete, unmitigated pass-through of stranded costs to customers would deny them the

¹⁷⁴ See Utility Restructuring Act of 1996, R.I. Gen. Laws Title 39 (1996); New Hampshire House Bill 1392 (signed May 24, 1996); State of Vermont Public Service Board, Draft Report and Order, October 16, 1996.

benefits of the competitive market and make them the insurers of the shareholders.

Restructuring then would not achieve its purpose.

In addition, there is a compelling public interest in the early resolution of this issue. While the Department does not concede the electric companies' legal claim to entitlement to recovery of these costs, the experience of the interstate pipeline industry during the mid-1980s suggests that delay in making provision for stranded costs recovery could ultimately prove counterproductive from consumers' perspective if recovery is denied in the short term but then resolved in the companies' favor in court after a delay of several years. Our legal analysis notes that this is a case of first impression, which means that there is inherent uncertainty as to its ultimate resolution in the courts.

In 1984, the FERC eliminated minimum-bill provisions in existing pipeline tariffs. Elimination of Variable Costs from Certain Natural Gas Pipeline Minimum Commodity Bill Provisions (FERC Order 380), 18 C.F.R. § 154 (1984). As a consequence, pipeline customers pursued competitive natural gas supply options, leaving many pipelines holding producer contracts with minimum-take provisions to incur unfunded take-or-pay obligations. These obligations accrued on a compounding basis for several years, without any mechanism for passing them through. Ultimately, federal courts ruled that the FERC had erred in failing to make provision for recovery of stranded costs. Associated Gas Distributors v. FERC, 824 F.2d 981 (D.C. Cir. 1987), cert denied 485 U.S. 1006 (1988). The agency subsequently enacted a take-or-pay policy that enabled pipelines to recover these costs. Regulation of Natural Gas Pipelines After Partial Wellhead Decontrol (FERC Order 500-H), 18 C.F.R. §§ 2 and 284 (1989). However, as a result of the delay in resolution of the issue, liabilities on many pipelines' systems

had increased dramatically. The delay in resolution of the issue led to a significant total increase in the costs borne among producers, pipelines and consumers. The delay also resulted in significant litigation costs, and a postponement of the benefits of a competitive market for natural gas. Such a delay in electric restructuring would not serve the interests of consumers.

Accordingly, where electric companies can demonstrate that restructuring would result in net, non-mitigable stranded costs incurred pursuant to the obligation to serve, the Department's policy pursuant to our authority under G.L. c. 164, §§ 76 and 94, would be to allow electric companies a reasonable opportunity to recover such costs.

5. Standard of Review

Based on the policy considerations discussed above, the Department determines that electric companies should have a reasonable opportunity to recover net, non-mitigable stranded costs. Therefore, the Department must establish a standard to apply to electric company requests for stranded cost recovery which maintains the proper allocation of risks and rewards between electric companies and ratepayers and ensures that electric companies have a reasonable opportunity to recover net, non-mitigable stranded costs. In creating this standard of review for electric company stranded cost filings, the Department relies upon ratemaking precedent on the allocation of economic risks and rewards and the recovery of costs, including costs associated with uneconomic assets.

The Department proposes to apply the following standard in assessing the electric companies' calculation of stranded costs. First, in order to establish that stranded cost recovery is warranted, an electric company must demonstrate that net, non-mitigable stranded costs exist. See Electric Industry Restructuring, D.P.U. 95-30, at 32 (1995). It is not sufficient to

demonstrate that certain costs are above-market. Above-market costs do not equal stranded costs; in order to establish that costs are stranded, an electric company must demonstrate that such costs have not been or would not be recovered. Stow Municipal Electric Department v. Hudson Municipal Light Department, D.P.U. 94-176, at 45 (1995), citing D.P.U. 95-30, at 32. Further, an electric company must demonstrate that it has taken all available and reasonable means to maximize mitigation of stranded costs. Id. at 45-46.¹⁷⁵ With reference to purchased power agreements, each electric company must demonstrate that the Department has approved the purchased power agreement for which stranded costs are claimed. Where such a demonstration cannot be made, the electric company must demonstrate the prudence of the contract at the time the electric company entered into the contract based on what it knew or reasonably should have known. The Department will not allow recovery of costs that have not been adequately documented or which have not been subject to mitigation efforts. Id. at 46.

One aspect of mitigation that requires specific comment is contract renegotiation. As noted below, the Department strongly encourages electric companies to renegotiate all above-market purchased power agreements. An electric company, in establishing that it has maximized its mitigation, must present evidence to justify its management decisions and demonstrate that the decisions are not inconsistent with valid policies enforced by the Department. Fitchburg Gas & Electric Light Company v. Department of Public Utilities, 375 Mass. 571, 578-79 (1978), citing New England Telephone & Telegraph Company v. Department of Public Utilities, 360 Mass. 443, 493 (1971). Electric companies have been on notice for many years that management must

¹⁷⁵ For a discussion of what constitutes mitigation, see Section XI.E, below.

respond to the changes in the electric industry. "The electric utility industry is changing, not as a result of regulation, but as a direct result of economic and technological forces. Management must recognize and respond appropriately to these changes." Boston Edison Company, D.P.U. 85-266-A/85-271-A at 10 (1986). Accordingly, an electric company must demonstrate that its management decisions, including the decision whether to terminate or amend a contract, are prudent in light of the alternatives in a new competitive market.

Second, given the degree of complexity and uncertainty inherent in the underlying assumptions of the stranded cost calculation method we propose below, we note that a reasonable range of stranded costs may be proffered for a particular electric company. A rate or charge is not confiscatory if it falls within the range of reason. Duquesne Light Company v. Barasch, 488 U.S. 299 (1989); New England Telephone & Telegraph Company v. Department of Public Utilities, 371 Mass. 67, 78 (1976). Therefore, the Department may set a stranded cost charge based on a calculation that falls anywhere within a reasonable range. See Boston Edison Company, D.P.U. 85-266-A/85-271-A (1986) (Department found that the return on equity allowed should be at the bottom end of the reasonable range). Among the factors we will consider in determining the range of reasonableness is whether there was an explicit allocation of risk between shareholders and ratepayers.

Under the Department's precedent on the recovery of non-economic assets, the Department has discretion, within the range of reasonableness, with respect to the return an electric company may earn on its prudently incurred investments. In determining the return, if any, an electric company may earn on its stranded costs, which are, by definition, costs associated with uneconomic assets, we will review a number of factors, including the existence of an explicit

allocation of risk between shareholders and ratepayers, the reduced risk connected with stranded cost recovery and the prudent management of an electric company. An electric company is required to file, with its stranded cost calculation, a proposal for calculating a return, if any, on the investments to which stranded costs apply with a supporting rationale.

C. Entitlement to Recovery - Purchased Power Agreements

1. Introduction

Traditionally, each electric company has had an obligation to provide adequate service at reasonable rates to all customers within its service territory. Commonwealth Electric Company v. Department of Public Utilities, 397 Mass. 361, 368-369 (1986), cert. denied, 481 U.S. 1036 (1986). In order to fulfill this obligation to serve, electric companies have entered into agreements to purchase power ("purchased power agreements" or "PPAs") from other generators of electricity including independent power producers, small power producers, cogenerators (collectively referred to as non-utility generators or "NUGs") and other investor-owned electric companies. In some instances, electric companies were required to enter into PPAs under state or federal regulations.¹⁷⁶

¹⁷⁶ Pursuant to PURPA, 16 U.S.C. §§ 796 and 824a-3, electric utilities are required to offer to purchase electric energy from QFs and small power producers. PURPA requires that the rates for such purchase be just and reasonable and non-discriminatory. 16 U.S.C. § 824a-3(b). PURPA also requires state regulatory commissions for utilities they regulate, and non-regulated public utilities individually, to conform their conduct to federal PURPA standards.

There are two forms of PPAs at issue in the electric companies' claims for stranded cost recovery: (1) wholesale agreements between electric companies and qualifying facilities ("QFs")¹⁷⁷; and (2) wholesale agreements between electric companies and other NUGs or other electric utilities. The electric companies claimed that a significant portion of these PPAs are uneconomic. That is, in a competitive market, the price for electricity would be lower than what the electric company is obligated to pay the power producer under the PPA. The relative impacts of above-market PPAs differ substantially by electric company, but for at least one electric company, the vast majority of the stranded costs that could result from the introduction of retail access reflect payments based on contract obligations to third-party generators (COM/Electric August 2, 1996 Comments at 20). The electric companies asserted, based on arguments specific to PPAs, that they are entitled to recover the above-market portion of these PPAs as stranded costs (see, e.g., id.).

In D.P.U. 95-30, at 35, the Department stated that a structured transition that allows an appropriate measure of stranded cost recovery, rather than risking the abrogation of existing commitments, would be in the public interest, because it would ensure the provision of sound electric services during the transition. Further, the Department stated that existing commitments should be honored because the reliability of commitments in general is an essential element in any future industry structure. Id.

¹⁷⁷ Pursuant to PURPA, if a power generation project meets certain requirements, it is characterized as a facility that qualifies for a specific regulatory treatment. 16 U.S.C. § 796 (18) (B).

The Department's May 1 Rules were intended to provide for full and fair competition in a competitive market where there would be new opportunities for electric companies and non-utility generators, including those now holding above-market PPAs. The May 1 Rules provided for recovery of above-market PPAs within a proposed ten-year transition period; the Department also proposed incentives to encourage the renegotiation of above-market PPAs.

2. Issues Raised

a. Legal Basis for Recovery

Many commenters argued generally that, if the Department fails to honor existing commitments associated with PPAs, the Department would cause electric companies to default on their binding obligations, and that any such default would inevitably jeopardize the financial integrity of the affected electric companies and the reliability of the electric service they provide to the customers, threaten the restructuring effort, and trigger protracted litigation (see, e.g., COM/Electric August 2, 1996 Comments at 21). As argued, if the Department fails to honor existing commitments, the faith of the financial community in the certainty of future market and regulatory structures would be undermined, jeopardizing the ability of electric companies to borrow funds and increasing the cost of capital (COM/Electric August 2, 1996 Comments at 29).

According to many electric companies, the legal basis for stranded cost recovery is dependent on the form of the PPA (BEC Co August 2, 1996 Comments at 19-20; COM/Electric August 2, 1996 Comments at 26-27; FG&E August 2, 1996 Comments at 30-36). Electric companies argued that with respect to wholesale agreements between electric companies and non-qualifying facilities, or other electric companies, which are directly regulated by the FERC, federal law restricts the Department from taking action that is in conflict with passing through the full

costs of FERC-approved rates (COM/Electric August 2, 1996 Comments at 26-27; FG&E August 2, 1996 Comments at 8-9). The electric companies also argued that jurisdiction over wholesale PPAs between electric companies and QFs has been delegated to the states under PURPA, and that the Department has explicitly addressed electric company recovery of these costs in its regulations at 220 C.M.R. § 8.03(3) (id.).

FG&E has argued that a state commission's determination of a just and reasonable rate under PURPA equates to a federally-determined rate (FG&E August 2, 1996 Comments at 33). As argued, the FERC has in effect delegated to state commissions the authority to determine rates for what are otherwise FERC jurisdictional facilities (id.). According to FG&E, by delegating this authority to state commissions, the FERC has implicitly approved the state commission's determination of a just and reasonable rate (id.). The argument is that a state commission is thus preempted from denying recovery of what is essentially a "federally-determined" rate under the filed-rate doctrine.¹⁷⁸ In addition, FG&E argued that common law and policy dictate that electric companies recover their purchased power costs (FG&E August 2, 1996 Comments at 8-9). The electric companies argued that, under Winstar, the Department must compensate electric companies for any damages arising from alterations to the existing regulatory arrangement (see, e.g., FG&E August 2, 1996 Comments at 30).

While no commenter argued that the PPAs are not binding, many suggested that the recovery of PPA costs must be tied to the electric companies' efforts to mitigate those costs (see

¹⁷⁸ The filed-rate doctrine provides that states must give full recognition in retail rates to all costs included in a wholesaler's FERC-filed tariff, pursuant to the Supremacy Clause of the U.S. Constitution.

IEC August 2, 1996 Comments at 4; AIM May 24, 1996 Comments at 31; Attorney General May 24, 1996 Comments at 8). At least one commenter argued that the Department could conduct prudence reviews of electric company decisions (DOER August 2, 1996 Comments at 23). As an example, DOER stated that the Department could inquire into the decisions by MECo and EECco to purchase their respective all-requirements power from affiliated generation suppliers in light of the potential availability of more economical alternative supplies (DOER August 2, 1996 Comments at 23).

b. PPA Renegotiation

In this proceeding, the Department investigated various incentives intended to encourage electric companies to renegotiate their above-market PPAs. Several commenters stated that the Department does not have authority to penalize an electric company for failure to renegotiate a contract; instead, commenters recommended alternative incentive mechanisms (see e.g., COM/Electric August 2, 1996 Comments at 17; IEC August 2, 1996 Comments at 4). Others commented that the Department can encourage parties to renegotiate their PPAs, subject to three limitations: (1) the Department cannot act arbitrarily; (2) the Department cannot impair the financial integrity of the electric company; and (3) the Department cannot impair the parties' rights under the Contract Clause¹⁷⁹ (DOER August 2, 1996 Comments at 18). The electric companies argued that the Department cannot penalize an electric company for complying with the terms of a PPA and may not encourage parties to such contracts to violate the covenants of fair dealing and good faith (FG&E August 2, 1996 Comments at 9).

¹⁷⁹ The Contract Clause provides "No State shall ... pass any ... Law impairing the obligations of contracts...." U.S. Constitution, Art. I, Sec. 10, cl. 1.

The comments included the following proposals for incentive mechanisms for renegotiating PPAs: (1) limiting recovery of PPA stranded costs to ten years; (2) conditioning supplier registration of NUGs upon their renegotiation of existing above-market contracts; (3) denying recovery of PPA stranded costs which could have been avoided by terminating an above-market PPA; (4) requiring good-faith renegotiation efforts as a condition of stranded cost recovery for a PPA; (5) splitting the savings from renegotiation; (6) allowing electric companies to recover the transaction costs of renegotiation; and (7) using the differences in capital costs between an integrated electric company and a NUG to finance renegotiation.

3. Current Department Proposal

As stated above, in the current regulatory framework, electric companies have entered into PPAs in part to fulfill their obligation to serve and in further part as a response to specific regulatory mandates. Many of the PPAs were entered at purchase rates based upon long-term projections that have turned out to be above the electric companies' actual cost of generation and current market price levels. As a result, the PPAs have resulted in high purchase rates that remain embedded in electric companies' cost of service. Unlike other categories of stranded costs, the PPAs represent commitments within a framework of contract law, rather than an alleged regulatory compact. Accordingly, the legal analysis of whether electric companies are entitled to recover claimed stranded costs associated with PPAs follows a somewhat different course. The issue of whether PPA costs are recoverable must be analyzed as a series of sub-issues relative to the type of contract involved, that is, a QF contract or other wholesale contract, and the potential for renegotiation of each type of contract.

Wholesale PPAs that are not with QFs include, as their price term, the wholesale rate approved by FERC. Under the Federal Power Act, FERC has the exclusive authority to determine the reasonableness of wholesale rates. 16 U.S.C. §§ 824 (a) and (b). Orders of FERC made in accordance with the authority granted to it under the Federal Power Act have preemptive effect. Mississippi Power & Light Company v. Mississippi Ex Rel. Moore, 487 U.S. 354, 371 (1988), citing U.S. Constitution Article VI, cl.2; Nantahala Power & Light Company v. Thornburg, 487 U.S. 953, 970-971 (1986). The filed-rate doctrine provides that states must give full recognition in retail rates to all costs included in a wholesaler's FERC-filed tariff, pursuant to the Supremacy Clause of the U.S. Constitution. Mississippi Power & Light Company v. Mississippi Ex Rel. Moore, 487 U.S. 354 (1988), citing U.S. Constitution Article VI, cl.2.

However, the filed-rate doctrine does not pose an absolute bar to state commission review of these wholesale, non-QF PPAs. Commonwealth Electric Company, 397 Mass. 361, 379 (1986); Pike County Light & Power Company v. Pennsylvania Public Utilities Commission, 77 Pa. Comm. 268, 273, 274 (1983). Under Commonwealth Electric, the Department may consider whether an electric company acted prudently in purchasing a particular supply under a FERC tariff rather than choosing an alternative, as well as inquire into the contractual circumstances surrounding the purchase that have not been specifically addressed by the FERC. See also Kentucky West Virginia Gas Company v. Pennsylvania Public Utility Commission, 837 F.2d 600, 609 (3rd Cir. 1988).

Thus, under the preemption and filed-rate doctrines, the Department may not bar electric companies from passing through to retail customers FERC-mandated wholesale rates, unless the Department determines that the purchasing utility, given its options, was not prudent in entering

into the underlying contract at the FERC-approved rate. Commonwealth Electric Company, 397 Mass. at 379. The Department has conducted "prudence-type" reviews of PPAs in the context of either rate proceedings under G.L. c. 164, § 94, or contract approvals under G.L. c. 164, § 94A,¹⁸⁰ or 220 C.M.R. §§ 10.00 et seq. Therefore, relative to those contracts which the Department has approved, the Department has conducted a Commonwealth Electric review.¹⁸¹

Based on the preemption and filed-rate doctrines, and where the Department has previously determined that the contracts are prudent, the Department may not bar the utility company from collecting its generation costs associated with the PPAs. However, in a restructured industry, rates will be unbundled and the Department will no longer regulate generation rates. Therefore, while the Department would not prohibit an electric company from passing through to its customers to whom it supplies generation services the FERC-mandated wholesale rates, the Department would not have the regulatory jurisdiction to pass through the PPA costs in generation rates to customers. Nevertheless, the Department has found, for policy reasons, that electric companies should have a reasonable opportunity to recover net, non-mitigable stranded costs through a non-bypassable access charge assessed on the distribution bill. Therefore, the Department determines that it should provide electric companies with a reasonable

¹⁸⁰ Under G.L. c. 164, § 94A, no gas or electric company may enter into a contract for the purchase of gas or electricity covering a period in excess of one year without the approval of the Department.

¹⁸¹ In its stranded cost filings, each electric company must demonstrate that the Department has approved the PPA for which stranded costs are claimed. Where such a demonstration cannot be made, the electric company must demonstrate the prudence of the contract at the time the electric company entered into the contract based on what it knew or reasonably should have known.

opportunity to recover net, non-mitigable stranded costs associated with wholesale PPAs that have been previously approved by the Department.

With respect to wholesale contracts between electric companies and QFs, pursuant to PURPA, electric companies are required to offer to purchase electric energy from QFs and small power producers. 16 U.S.C. § 824a-3. PURPA also requires state regulatory commissions for the electric companies they regulate, and non-regulated public utilities individually, to conform their conduct to federal PURPA standards. *Id.* The Department, in implementing regulations under PURPA, adopted 220 C.M.R. § 8.03(3), which provides:

Costs incurred by a utility for the purchase of electricity from a qualifying facility are recoverable through rates charged to customers for the term of the contract where the rate(s), terms and conditions for purchase from the qualifying facility have been approved by the Department pursuant to these regulations.

Moreover, in Freehold Cogeneration Association L.P. v. Board of Reg. Comm'rs of New Jersey, 44 F.3d 1178, 1194 (3rd Cir. 1995), the Third Circuit Court of Appeals held that once a state commission approved a PPA with a QF, any action by the state commission to reconsider its approval or to deny passage of those rates to the electric company's customers was preempted by federal law.

Thus, with reference to PPAs between electric companies and QFs, the PPAs have been reviewed and approved by the Department. The electric companies have a reasonable expectation of recovering costs associated with those PPAs given the Department's regulation at 220 C.M.R. § 8.03(3). Given the electric companies' reasonable expectation, and the holding in Freehold, the Department determines that electric companies should have a reasonable opportunity to recover net, non-mitigable stranded costs associated with PPAs entered into with

QFs. In this instance, the Department's principle on stranded cost recovery requires electric companies to minimize the costs associated with the QF contracts by prudent management of the contracts, including exercising buyout and renegotiation options.

With respect to incentives to encourage renegotiation of above-market PPAs, the Department is not persuaded by the argument that the Contract Clause absolutely prohibits the Department from encouraging, through appropriately-designed incentive mechanisms, the modification or renegotiation of previously approved wholesale contracts.¹⁸² The Department has concluded, in D.P.U. 95-30, and reaffirms here, that the public interest is served by the creation of a fully competitive market for electricity. The Department strongly believes that, to the extent electric companies can reduce their costs associated with above-market PPAs, ratepayers as well as market participants will realize the benefits of competition sooner. The continuation of the above-market PPAs could inhibit the development of a competitive market, delaying the benefits of lower electric rates to consumers and the new opportunities available for all NUGs. Given that the continued existence of the PPAs poses a barrier to the benefits of competition, a regulation encouraging the renegotiation of above-market PPAs that is based on reasonable

¹⁸² A review of case law indicates that a court may determine that an act of the legislature that requires the renegotiation of above-market PPAs is reasonable given the legitimate public policy interest in reducing electric rates. A regulation "does not violate the Contract Clause simply because it has the effect of restricting, or even barring altogether, the performance of duties created by contracts entered into prior to its enactment." Arthur D. Little, Inc. v. Commissioner of Health & Hospitals of Cambridge, 395 Mass. 535, 555-556 (1985), citing Exxon Corp. v. Eagerton, 462 U.S. 176, 190 (1983); see also Fitchburg Gas and Electric Light Company v. Department of Public Utilities, 395 Mass. 836, 853-854 (1985). "The State may act for the general good of the public although contracts previously entered into may be affected." Fitchburg Gas, 395 Mass. at 854, citing Home Bldg. & Loan Ass'n v. Transp. Co. v. Railroad Comm'n of Cal., 251 U.S. 228, 232 (1920).

conditions and is of an appropriate character may not unconstitutionally impair contractual obligations. See Energy Reserves Group, Inc. v. Kansas Power & Light Co., 459 U.S. 400, 412 (1983).

While the Department may have the authority to issue regulations that would encourage contract renegotiation, we acknowledge that there are practical impediments to doing so. The recommendations for incentives to renegotiate PPAs that have been presented to the Department all raise significant implementation issues. These include equal application of the mechanism¹⁸³ and the administrative complexity of reviewing the parties' renegotiation efforts. For example, because some entities that are parties to the PPAs are subject to limited Department oversight, there are restrictions on what the Department can require of them. Some proposed incentive mechanisms with respect to contract renegotiation would require an evaluation by the Department of the parties' good faith efforts, a task with no clear standard and one that is not amenable to objective review. Certain proposed incentive mechanisms may actually contravene the Department's principle that seeks to develop a fully competitive market as a means of reducing costs for consumers. Limiting recovery of PPA costs to ten years, as proposed in the May 1 Rules, may result in increased electric rates in the near term, in conflict with the Department's principle that seeks near-term rate reductions. Moreover, with respect to the proposed incentive mechanism tied to registration requirements, while the Department maintains

¹⁸³ An incentive mechanism must apply equally to all suppliers who hold above-market PPAs, but the proposed incentive mechanism regarding the requirement that a supplier must attempt to renegotiate its above-market PPAs in order to participate in the Massachusetts market may have unequal application. For example, some entities that hold above-market PPAs will not seek to participate as suppliers in the future Massachusetts electricity market, and therefore the proposed incentive would not apply to them.

that suppliers should be subject to a registration requirement, the Department is concerned that this proposed incentive mechanism could create market barriers to suppliers by allowing electric companies to contest the suppliers' efforts to renegotiate in good faith.

While several commenters have proposed mechanisms that would split the savings from PPA renegotiations among the contracting parties, the percentage splits vary widely from one proposal to the next.¹⁸⁴ The Department has no basis at this time for choosing any particular percentage split of the savings among the affected parties. No commenter has demonstrated that its proposed split achieves the proper balance between reducing costs to ratepayers and providing the parties to the PPAs adequate incentives to induce them to actually negotiate substantial cost reductions. Any mechanism to provide an incentive to renegotiate by splitting the savings from renegotiation should address the above issues and provide for Department review that is not unduly burdensome.

After thorough exploration and review of all relevant law, and in consideration of administrative efficiency, the Department concludes that we have not been presented with any proposal sufficiently detailed and supported that it could be provided by rule for all electric companies. Nonetheless, we continue to strongly urge renegotiation and favor codification of legislative intent to encourage contracting parties to renegotiate above-market PPAs, noting that the existence of these contracts will pose a continuing obstacle to the full benefits of competition. The Department notes that commenters can refine their proposals to encourage renegotiation in the context of company-specific adjudications to implement restructuring.

¹⁸⁴ One commenter proposed that the NUG's share of the savings come in the form of reimbursement for reasonable transaction costs in renegotiating the PPA.

D. Definition of Stranded Costs

1. Introduction

It is necessary to adopt a clear definition of the categories of stranded costs in order to facilitate stranded cost proceedings, provide an orderly transition to competition in electricity generation, and ensure that electric companies do not take undue advantage of any policy decision to allow stranded cost recovery.

In D.P.U. 95-30 (1995), the Department defined stranded costs as

(1) the amount of the book cost or fixed cost associated with producing electricity from existing generation facilities that might not be recovered by the competitive market price for generation; (2) liabilities for future decommissioning and radioactive waste disposal associated with nuclear power plants that might not be recovered by the market price; (3) the amount by which the cost of existing contractual commitments for purchased power exceeds the competitive market price for generation; and (4) prudently incurred regulatory assets related to generation that were intended to be collected over time consistent with regulatory precedent or order.

Id. at 32. The Department noted that its definition of stranded costs applied only to commitments incurred prior to the August 16, 1995 date of the Order in D.P.U. 95-30 since, from that point forward, electric companies would be in a position to avoid entering into new commitments and incurring costs that could be stranded by the introduction of customer choice.

Id. Consistent with this finding from D.P.U. 95-30, the Department included in the May 1 Rules a requirement that the portion of nuclear decommissioning costs attributable to plant operation after August 16, 1995 ("incremental decommissioning costs") be separately identified in a company's stranded cost filing.¹⁸⁵

¹⁸⁵ An example of incremental decommissioning costs is the cost of storing on-site (prior to
(continued...))

2. Issues Raised

Many commenters raised issues related to the Department's inclusion of nuclear decommissioning costs in stranded costs and the possibility that incremental decommissioning costs would not be recoverable through the stranded cost access charge. Some commenters argued that the Department should allow for full recovery of nuclear decommissioning costs, including incremental decommissioning costs, and suggested that separating incremental decommissioning costs from other decommissioning costs would be an extremely difficult task (WMECo August 2, 1996 Comments at 29; MMWEC August 2, 1996 Comments at 8; MMLP August 2, 1996 Comments at 15-16; Tr. 11, at 181).

Other commenters argued that nuclear units should compete based on all going-forward costs, including incremental decommissioning costs, and that future nuclear plant operators should bear at least some of the risk for incremental decommissioning costs (see, e.g., DOER August 2, 1996 Comments at 44; WMECICG August 2, 1996 Comments at 7-8; AIM August 2, 1996 Comments at 26; MassPIRG August 2, 1996 Comments at 1-4). Specific methods to identify incremental decommissioning costs were proposed (AIM August 2, 1996 Comments at 26; MassPIRG August 2, 1996 Comments at 1-4).

3. Current Department Proposal

In the Model Rules, the Department retains the definition of stranded costs originally set forth in D.P.U. 95-30. However, in consideration of the comments received, it is clear to the

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removal for ultimate disposal) that portion of spent nuclear fuel that is generated due to plant operation after August 16, 1995.

Department that nuclear decommissioning costs differ in some ways from the other components of the stranded cost definition. In particular, we note that whether or not nuclear decommissioning costs are collected through a stranded cost charge may depend in large part upon matters within the control of the Nuclear Regulatory Commission ("NRC") rather than the Department. However, we find that, in the event that nuclear decommissioning costs are collected through the stranded cost charge, it is appropriate to defer determination of the cutoff date for inclusion of incremental decommissioning costs in such charges until a practical method for doing so is determined in company-specific proceedings.

The NRC establishes policies that govern how nuclear power plant licensees provide for the decommissioning of nuclear facilities at the end of their operating lives. In particular, the NRC requires that plant owners/operators provide assurance that funds sufficient to decommission a nuclear facility will be available at the time of plant shutdown. Acceptable methods of providing this financial assurance are described in 10 C.F.R. § 50.75, which requires that licensees provide funding assurance for the full estimated cost of decommissioning, either through full up-front funding or by an allowable guarantee or surety mechanism. In the case of nuclear plant owners that meet the NRC's definition of an electric utility, the owner is presumed by the NRC to be able to collect, through electric rates, sufficient funds to provide for facility decommissioning at the end of its operating life. With respect to electric utilities under the jurisdiction of the Department, review of decommissioning cost estimates for the purpose of collecting such costs in rates has typically been done by the Department in company rate cases.

In a future electric industry structure in which generation is deregulated, many nuclear plant owners may no longer meet the NRC's definition of electric utility, and thus would be

required to meet the NRC's financial assurance requirements for non-electric utility licensees. The Department notes, however, that the NRC is currently reviewing its financial assurance provisions in light of federal and state proceedings to deregulate electricity generation (Draft Statement on the Restructuring and Economic Deregulation of the Electric Utility Industry, Nuclear Regulatory Commission, September 20, 1996). Where allowed or required by the NRC, the Department will review and allow collection of the estimated funds necessary for the decommissioning of nuclear facilities owned by companies that are currently under our jurisdiction. Such funds would be collected over the same period assumed for the calculation of decommissioning charges included in rates now, would be placed in the same investment mechanisms as required now, and would be reviewed and revised on a periodic basis, or as new information warrants.

Assuming that the NRC continues to require the Department to be responsible for the review of decommissioning cost estimates for the purpose of collecting such costs through rates, we must then address how to treat incremental decommissioning costs. As a matter of policy, the Department finds that in the interest of full and fair competition in generation, incremental decommissioning costs should be treated in the same manner as all other future operating costs of competing generating facilities; that is, such costs should be the responsibility of plant owners or shareholders, and should not be recovered from ratepayers. Therefore, the Department's proposed rules retain the requirement that incremental decommissioning costs be estimated and provided in the embedded cost summary of company stranded cost filings.

The Department recognizes that incremental decommissioning cost estimates are likely to be subject to considerable uncertainty, and may represent a relatively small portion of overall

decommissioning cost estimates. The Department would not want shareholders to be held hostage to the uncertainty surrounding this estimate, and does not want this policy to jeopardize unnecessarily the continued operation in the region of nuclear plants that are otherwise cost-effective. This is of particular concern to the Department since any impact on the decision to continue operation could affect other Department policy interests in the areas of public safety and environmental quality. For example, the cost and difficulty of meeting air quality requirements for criteria pollutants now, and possibly for other pollutants such as greenhouse gases and hazardous air pollutants in the future, may increase if nuclear plant closures force increased reliance on other types of resources.

No commenter in this proceeding has, to date, presented the Department with a satisfactory generic and practical method for identifying or estimating incremental decommissioning costs, or otherwise assigning responsibility for such costs to plant owners. Yet, as a way to ensure a fair allocation of the costs and risks of continued operation between ratepayers and shareholders, and in the interest of full and fair competition in generation, the Department will require electric companies, and encourage others, to file proposals to accomplish this objective, and will review such proposals on a case-by-case basis in stranded cost proceedings. In the Model Rules we retain the requirement that companies provide estimates of incremental decommissioning costs in their stranded cost filings. However, in consideration of the uncertainty involved and our decision to postpone review of this issue to individual company proceedings, we will consider all costs associated with decommissioning as sunk until such time as we find a method of distinguishing costs that is practical and satisfactory.

E. Calculation of Stranded Costs

1. Introduction

As noted in Section XI.D, above, it is important to define carefully the categories of costs that will be included in stranded cost calculations. It is equally important to prescribe clearly the method by which stranded costs will be calculated pursuant to the definitions established in Section XI.D. Thus, in this section we discuss the calculation and review of the stranded cost charges to be included on customers' bills at the introduction of retail choice, and the process for the reconciliation of such charges over time.

In D.P.U. 95-30, the Department focused on the definition of stranded costs, and on the principle that electric companies should be afforded a reasonable opportunity to recover such costs. However, the Department did not prescribe at that time the method by which such costs should be calculated and presented to the Department for review. The Department noted in the May 1 Statement at 59-60 that the electric companies' stranded cost presentations that were made in February 1996 (pursuant to the directives in D.P.U. 95-30) differed substantially in terms of format and calculations, and that common procedures for calculating and reporting stranded costs would be critical for the timely implementation of industry restructuring in Massachusetts. The stranded cost section of the Department's May 1 Rules was thus intended to address this concern by providing a common procedure for the initial setting of each company's stranded cost charge, and by presenting the timing and parameters of subsequent stranded cost charge reconciliations. The proposed format provided for stranded cost calculations that include administrative determinations or market valuations of generating assets, or combinations of the two. May 1 Statement at 54.

- a. Present Value Stranded Cost Calculation

In order to simplify the presentation and review of stranded cost filings, the May 1 Statement and Rules proposed a filing format that separated a company's presentation into (1) "embedded costs" -- which are known and may be verified using publicly-available documents; and (2) "mitigation" -- information on all company actions and occurrences that will reduce the level of embedded costs over time. May 1 Statement at 60. The Department stressed that companies are expected to pursue all possible methods by which additional income and reduced expenses could maximize mitigation, and thereby minimize stranded costs. Id. at 60-61.

Section 13.03(2) of the May 1 Rules defined embedded costs as:

the cost of existing assets and obligations incurred by an Electric Company prior to August 16, 1995, pursuant to the provision of electric service, including (1) the amount of the book cost directly related to existing generating facilities that are wholly or partly owned by the company, (2) the minimum financial obligation under existing long-term power purchase contracts, (3) the amount of the book costs associated with regulatory assets related to generation, and (4) the amount of costs that will be required to decommission nuclear generating facilities.

The provisions related to the presentation and calculation of embedded costs included in the May 1 Rules in Section 11.03(3)(a)(ii) would require that companies present embedded costs for each category included in the definition above, and that such information be broken down into relevant sub-categories (e.g., the May 1 Rules at Section 11.03(3)(a)(ii)2 would require that book costs of owned generating facilities be identified by plant, aggregated by fuel type, and in total). In order to allow for the tracking of embedded cost information to public documents, the embedded cost provisions require that a company present embedded cost information as it was reported in FERC Form 1 filings for each year beginning with the year 1994, and that any discrepancies between the embedded cost presentation and information in the most recent FERC Form 1 filing be identified and explained (see May 1 Rules at Section 11.03(a)(ii)5-6). Finally,

consistent with the Department's statement that its definition of stranded costs applied only to commitments incurred before August 16, 1995, the May 1 Rules required that a company's embedded cost presentation identify what portion of nuclear decommissioning cost estimates derives from generating facility operation after that date.

Section 11.03(2) of the May 1 Rules defined mitigation as all actions or occurrences that reduce an electric company's level of embedded costs over time, including both matters within the company's control and those not wholly within the company's control. Section 11.03(2) of the May 1 Rules specified that mitigation includes, but is not limited to, (1) sales of capacity, energy, and ancillary services from generating facilities that are wholly or partly owned by the company; (2) sales of capacity, energy, and ancillary services from generating facilities with which the company has a power purchase agreement; (3) adjustments to the company's minimum obligations under power purchase agreements that decrease such obligations, and that may be obtained through contract buy-out or renegotiation; and (4) sales and voluntary writedowns of company assets.

The provisions related to the presentation and calculation of mitigation included in the May 1 Rules in Section 11.03(3)(a)(iii) required that companies present estimates of mitigation for each of the categories included in the definition on both a present-value and annual basis. Since mitigation estimates will rely on uncertain forecasts of market prices and generating unit cost and operation factors, the mitigation provisions in the May 1 Rules required that companies summarize and describe the basis for all such projections used in mitigation estimates. These provisions further required a summary of opportunities for and timing of asset sales, contract renegotiation, and all other actions taken by an electric company to maximize its mitigation of

embedded costs. Finally, the May 1 Rules stated that a company shall include all income from sales associated with owned generation and PPAs between January 1, 1998 and December 31, 2007 (the proposed transition period) in its mitigation projection.

Once embedded costs are identified and mitigation is estimated, it is necessary to combine the two to determine the level of net, non-mitigable stranded costs for a company. In our May 1 Rules, the Department identified the procedures and format for calculation of stranded costs (see Section 11.03(3)(a)(iv)). The Department's May 1 Rules required that companies subtract the total mitigation projection from embedded costs to determine the net, non-mitigable stranded costs on a present value ("PV") basis. This company-wide PV stranded cost calculation would ensure that company assets with positive net value would offset, in part, the stranded costs associated with those company assets and obligations with negative net value.¹⁸⁶

b. Public Policy Incentives

In D.P.U. 95-30, the Department raised a number of important practical considerations related to the mechanism for the recovery of stranded costs. In particular, the Department stated that an appropriate mechanism for the collection of stranded costs must include strong incentives for electric companies to mitigate stranded costs, and should be designed to avoid or minimize any anticompetitive effects on the emerging generation market. D.P.U. 95-30, at 37-38. The Department required that proponents of stranded cost recovery demonstrate how their chosen

¹⁸⁶ Below, we discuss how a company would combine the PV stranded cost number with factors such as recovery periods, cost allocation, and rate design to establish the stranded cost access charges necessary to recover the company's PV stranded costs over time.

stranded cost recovery mechanism would facilitate a restructuring of the electric industry that is in the public interest. Id. at 39.

The Department noted that its public policy objectives will be met only if the electricity market of the future includes a competitive market for generation, and invited comments on how stranded cost recovery could be structured in order to provide a meaningful reward for company actions that will increase the competitiveness of the generation market as soon as possible. Id. at 55. The Department presented three options, and invited alternative proposals, for stranded cost collection mechanisms that would encourage a measured divestiture of generation assets without depressing the market value of such assets or being otherwise unduly disruptive to the generation market. Id. at 56-57.

2. Issues Raised

Comments on the Department's proposal focused on the definition of mitigation,¹⁸⁷ the difference between administrative and market determinations of the value of a company's assets, the uncertainty surrounding estimates of generation facility output and market price projections

¹⁸⁷ RAM and DOER proposed that the Department change its definition of mitigation to require inclusion of the value of all "non-T&D" assets (rather than "generating assets") (DOER Proposed Rules at 7; RAM May 24, 1996 Comments at 5). The May 1 Statement and Rules clearly stated that the Department expects companies to take every action possible to maximize the value of their existing assets, and to include a projection of maximum mitigation in their stranded cost filings. This expectation would include maximizing the value of all company non-T&D assets, including those not related to generation. However, the Department agrees with DOER and RAM that there is value in including such language explicitly in the definition of mitigation. The Department therefore has included the recommended change in the definition of mitigation.

for mitigation calculations, and the treatment of the residual value of electric company generation facilities in mitigation estimates.¹⁸⁸

Many commenters argued that a market test (or divestiture) would be the best way to determine the value of generating assets for the purpose of calculating stranded costs, because a market test would embody investors' perceptions not only of future market prices for electricity, but also of their ability to operate the assets. Commenters also noted that determining plant value through asset sales is likely to be easier and less contentious than estimating plant value through administrative determinations (see, e.g., Tr. 4, at 137-140).

Most commenters agreed that the estimation of mitigation through administrative determinations, involving uncertain projections of unit operation and market prices over time, will be a complex and controversial task. Some, such as CPC, suggested that to simplify matters and provide the correct incentives, the Department should adopt standards related to assumptions that may be made concerning the future availability and cost of electric company generation facilities, such as stating that facility operation assumptions must assume the prudent and efficient operation of such facilities (CPC May 24, 1996 Comments at 35). Others added that, given the

¹⁸⁸ With respect to embedded costs, EEC_o has requested that the Department alter its definition of embedded costs to account for potential future costs (associated with generator capital improvements and environmental liabilities) and for generating assets that may now be classified as regulatory assets. The specific items identified by EEC_o do not warrant changes or additions to the Department's general definition of embedded costs. The Department has made it clear, in D.P.U. 95-30 and the May 1 Statement, that investments made subsequent to the initiation of the Department's investigation into the restructuring of the electric industry are not to be included in stranded cost considerations absent specific approval by the Department. Further, the Department's current definition of embedded costs allows for the inclusion of items classified as regulatory assets related to generation.

diversity of generating facilities in the region, the Department should state what is expected in projections of facility performance and identify data that must be filed, but leave the determination of facility output and cost assumptions for review on a case-by-case basis (see, e.g., Tr. 15, at 123-131).

There was also agreement that electricity market price projections will be difficult and contentious at least in the early years, when the commodity markets may not be mature enough to identify stable prices. Although there was little agreement on how market commodity price projections should be estimated at the start of retail choice, some commenters agreed that this task is likely to be much easier in stranded cost charge reconciliations, after markets have had time to develop (see e.g., Tr. 15, at 165-166). Although no commenters proposed a specific method for market price projections to be included in the rules, the Attorney General suggested that it might be useful for the Department to require companies to file a range of relevant indicators, such as actual short-term purchase agreements, the cost of new generation facilities planned or under construction, and the results of any solicitations for long-term contracts (id., at 168-172).

In the May 1 Statement, the Department noted that companies might obtain significant income from continued ownership or sale of generating facilities after they have recovered their investment in such facilities from ratepayers through the stranded cost charge. This has been referred to as "residual value." Id. at 58. Comments on residual value in this proceeding focused not so much on whether the collection of stranded costs should take residual value into account, but rather on whether the accounting for this value should be done at the beginning or at the end of the transition period. On one hand, BECo suggested that the difficulty in putting a

number on residual value is a reason to defer its consideration until the end of the transition period, and then credit ratepayers for residual value at that time (Tr. 15, at 176-178). On the other hand, a number of commenters stated that an estimate of residual value must be built into the initial stranded cost calculation (1) to capture the benefits of this value, which are substantial; (2) to ensure that the collection of stranded costs is not higher than it should be, which would hinder the development of a competitive generation market; (3) to avoid inequities that would result if ratepayers in the near term bear a disproportionate share of the cost burden associated with the move to a competitive generation market; and (4) to avoid conflict with the principle of near-term rate relief (see e.g., WMECICG August 2, 1996 Comments at 3-4; DOER August 2, 1996 Comments at 24-25).

With respect to divestiture incentives, electric companies disputed the Department's authority to encourage divestiture, and opposed the Department's proposed divestiture incentive mechanisms. They maintained that the Department has no power to order divestiture and therefore has no power to promote divestiture indirectly, by allowing less than full recovery of stranded costs as a penalty for failure to divest. They also claimed that any reduction in stranded cost recovery caused by failure to divest would constitute a taking of property which is prohibited by the Constitution (see, e.g., BECo August 2, 1996 Comments at 15-18).

DOER claimed that the Department's three proposed incentive options are insufficient to induce divestiture (DOER May 24, 1996 Comments at 1). AIM indicated its support for the Department's first option, a lower rate of return for generating assets not divested, arguing that PUCs have for many years regulated electric companies' rates of return, in some cases rewarding some behavior or penalizing other behavior. In addition to comments on the Department's

proposed incentive mechanisms, some parties proposed alternative mechanisms (see, e.g., DOER May 1, 1996 Answers to Questions Posed in May 1 Statement at 20-22; and RAM May 2, 1996 Comments at 6-13).

3. Current Department Proposal

a. Present Value Stranded Cost Calculation

In our Model Rules, the Department retains the basic format proposed in the May 1 Rules for the presentation of stranded cost estimates. In particular, the Department reaffirms its proposal that companies separate information on embedded costs from mitigation information. Using this information, the company-wide mitigation projection is subtracted from the company-wide total embedded costs to identify the net, non-mitigable level of stranded costs for the company on a PV basis.¹⁸⁹

However, the Department does not include in our current proposal any explicit incentives to encourage the divestiture of generation facilities.¹⁹⁰ The Department's policy preference for divestiture was grounded in the fact that it could be the cleanest way to establish an objective determination of asset value and obtain a maximum level of mitigation. In the May 1 Statement, the Department also noted that divestiture of generation assets by the electric companies may provide the cleanest solution to the potential problem of inappropriate and anticompetitive

¹⁸⁹ In Section XI.F below, we discuss how the company would combine the PV stranded cost number with factors such as recovery periods, cost allocation, and rate design to establish the stranded cost access charges necessary to recover the company's PV stranded costs over time.

¹⁹⁰ See Section XI.C, above, for a discussion of incentives related to the renegotiation of power purchase agreements.

affiliate transactions. May 1 Statement at 27. In consideration of comments received in this proceeding, however, the Department is not convinced that the public policy incentives proposed in the May 1 Statement, or the alternatives presented by commenters, would encourage a voluntary and measured divestiture of company assets, one that would be effective in reducing the level of stranded costs collected from ratepayers. Further, the Department is concerned that implementation of the proposed mechanisms may actually benefit or penalize some companies more than others, and thus could actually have anticompetitive effects.

In the remainder of this section, the Department describes its current proposal concerning the components of the stranded cost calculation; in the next section, we discuss the information that should be presented in company stranded cost filings. All changes from the May 1 Rules identified below have been incorporated in the Model Rules presented herein at Appendix A.

The obligation of companies to maximize their mitigation of embedded costs is an inseparable component of the Department's policy decision to allow companies a reasonable opportunity to recover stranded costs. Given that the new competitive market, the development of which is intended to reduce electricity costs for ratepayers, may present electric companies with substantial opportunities to increase their financial strength, the requirement that utilities maximize the level of mitigation is reasonable and critical to ensure that ratepayers experience the benefits of competition in the form of lower rates.

In the initial setting of the stranded cost charge, the obligation to maximize mitigation must be translated into a projection of company-wide mitigation, so that the stranded cost charge implemented at the onset of retail choice reflects the maximum mitigation of the companies' embedded costs over time. Most of the issues raised in this proceeding with respect to

mitigation addressed the uncertainties associated with the translation of the maximum possible mitigation obligation into dollars, for the purpose of calculating an appropriate stranded cost charge. In particular, projections of facility economic life; facility power output and operating costs; prices for electricity market commodities; and the value of generating assets not related to the income that may be obtained through plant operation (residual value) are all subject to a significant level of subjective judgment and uncertainty in calculation.

Divestiture would be the cleanest way to resolve these uncertainties. We believe that the easiest way to identify the value of an asset for the purpose of estimating mitigation would be through the sale of the asset, provided that the sale were conducted in a manner, and at a time, likely to maximize the price received. However, absent such a sale, the assumptions used by a company (and those proposed by intervenors) in mitigation projections concerning the value of a facility should reflect the likely expectations of a successful bidder, e.g., that the costs to operate the facility can be driven down; that the output from such a facility can be increased; that efforts to market the output commodities (such as energy, capacity, reserves, AGC, and emission allowances) will be successful; that there is reason to believe that the price for market commodities will be high; and that the value of the equipment and site of the facility for repowering or the siting of additional or new capacity is high. The use of assumptions in mitigation projections based on these expectations would be consistent with (1) the long-standing ratemaking principle that electric companies are responsible for matters within their control, (2) the goal of near-term rate relief, and (3) the need to provide the proper incentives for electric companies to maximize efforts to mitigate embedded costs.

At a minimum, then, company assumptions and judgments in mitigation projections must reflect the principles and expectations outlined above. The Department's policy decision to allow electric companies to recover stranded costs must be conditioned upon the assumption that company management of operations, control of costs, and success in power marketing will maximize the income that can be obtained through the operation of generating assets. However, the Department concludes that, given the wide variations in generating unit age and technologies, and the immaturity and uncertainty of commodity markets, it is not appropriate at this time to require the application of specific or default assumptions related to these factors in company stranded cost filings. Mitigation projections will be reviewed on a case-by-case basis in company-specific proceedings consistent with the principles and expectations described above.

Finally, although projection of the residual value of generating assets will be difficult, companies must incorporate such estimates in the initial setting of the stranded cost charge. The Department is persuaded that the ownership of a power plant site is likely to provide significant value, in part due to the relative ease of repowering or constructing a new facility on site, and in part due to the importance of the location of some generating facilities from the standpoint of transmission system reliability. Thus, inclusion of an estimate of residual value in the initial stranded cost calculation, as opposed to at the end of some transition period, is necessary to meet the principles and expectations set forth above.

b. Filing Information

The Department continues to consider the clear, complete presentation of all electric company stranded cost information, market projections, and calculation methods a critical prerequisite for the collection of an electric company's projected stranded costs. Consistent with

the standard of review set forth in Section XI.C above, a company must present a clear, complete filing in order to demonstrate that stranded costs exist, that mitigation is maximized, and thus that stranded cost recovery is warranted.

Virtually all commenters agreed that stranded cost proceedings will be time-consuming, data-intensive, complex, highly contentious, and uncertain in outcome. However, the calculation of a stranded cost charge for each electric company is an essential condition to the initiation of retail choice and full and fair competition in generation in Massachusetts. Therefore, the Department proposes to include the following changes with respect to the information that must be presented in company stranded cost filings on embedded cost and mitigation, in order to facilitate the clearest and fullest presentation of information critical to the stranded cost charge calculation at the outset, and to reduce the necessary level of discovery of company filings.

Within the embedded cost discussion, changes are made to Sections 11.03(3)(a)(ii)2, 3, and 4 in order to accomplish this objective. In particular, electric companies must present: a more complete depiction of factors relevant to the expected retirement of owned generating facilities; copies of all PPAs, along with a summary of provisions that are relevant to the calculation of embedded costs associated with PPAs; and copies of decommissioning cost studies upon which the portion of embedded costs associated with nuclear decommissioning is based.

Of critical importance to the verification of an electric company's estimate of its overall level of embedded costs is the tracking of such information to public documents, such as FERC Form 1 filings, federal and state rate filings, and FERC- and Department-approved contracts or PPAs. Every electric company must support each component of its embedded cost calculation with all necessary supporting information and worksheets, including all calculations and methods

used, an explicit statement of any assumptions made by the company, and a clear description of the relationship between the company's numbers and the numbers that may be found in relevant public documents.

Concerning the estimation of the value of generating facilities in mitigation projections, we consider it necessary to take steps to facilitate complete review of the methods and assumptions used by companies for this purpose, and to test the relative impact on the stranded cost charge of alternative methods and assumptions that may be proposed by the company, the Department, or intervenors. We therefore require that mitigation filings present all pertinent data related to generating facility operations and costs, such as average and best historical performance, exceptional and average industry-wide performance and cost indicators, applicable NEPOOL performance standards (such as NEPOOL target unit availabilities), and other indices that the company deems relevant. Stranded cost calculations must be accompanied by sensitivity analyses so that the Department and parties can review how the stranded cost charge varies in response to changes in key factors and assumptions. In this area, we would expect to be able to test the variability of the stranded cost charge to changes in plant output and cost. We expect that such analyses will be included in companies' stranded cost filings in addition to, and in combination with, sensitivity analyses that explore the impact of a wide range of market price projections, estimates of residual value, and other factors important to the mitigation projection. Companies will be required to provide copies of filings on computer disk, including all spreadsheets used to estimate and test the sensitivity of stranded costs.

F. Stranded Cost Recovery Mechanism1. Introduction

Above, the Department described its proposal to require companies to use information on embedded costs and projections of mitigation to arrive at a single PV estimate of stranded costs. In this discussion, we describe our proposal for companies to incorporate information on items such as the stranded cost recovery periods for classes of assets, and cost allocation and rate design principles, in order to set the stranded cost access charges that will be necessary to collect a company's stranded costs over time. We also discuss our proposal for stranded cost access charge reconciliations.

The objective of the stranded cost recovery mechanism is to recover costs accurately and in a manner that is as competitively neutral as possible. The Department noted in the May 1 Statement that the stranded cost recovery mechanism should be non-bypassable, should be consistent with Department precedent on the non-discriminatory design of electric company rates, should be transferrable to future owners of generation facilities, and should not delay the development of a fully competitive market or significant reductions in rates. Id. at 38-39.

In its May 1 Statement, the Department proposed to require that, for each category other than nuclear decommissioning costs, stranded costs would be collected over a ten-year transition period, in a manner that is consistent with existing methods of cost functionalization, classification, allocation, and rate design for each rate class.¹⁹¹ Companies would be required to

¹⁹¹ The Department proposed that nuclear decommissioning costs be collected over the same period assumed in current rates. The Department's current proposal for the recovery of nuclear decommissioning costs is discussed in Section XI.D above.

collect stranded costs through a stranded cost access charge that has fixed and variable components, applied to the distribution portion of customers' bills. Id. Because one of the Department's principles of restructuring is the development of an efficient industry structure that achieves full and fair competition in the generation market, the Department proposed that all stranded costs be collected through a stranded cost charge only, so as to permit generation charges on customer bills to reflect only the price of generation service as determined by the market. Id.

In the May 1 Statement at 54, 60-63, the Department noted that mitigation estimates are likely to rely substantially on uncertain market price forecasts, and we proposed to allow for a reconciliation of stranded cost estimates outside a relatively wide percentage bandwidth to correct for major errors in projections of future market conditions. The Department set forth two aspects of the reconciliation of stranded costs. The first was that the stranded cost access charge would be reconciled after two, five, and ten years. The second was that there would be bandwidths set up for each reconciliation period. That is, there would be no need for reconciliation if the variation was less than 20 percent after two years. After five and ten years, the variation would need to be greater than 35 percent and 50 percent, respectively, before reconciliation would be necessary.

2. Issues Raised

Most comments focused on three aspects of the Department's proposed mechanism: the ten-year limit on stranded cost recovery; the collection of stranded costs through fixed or variable charges; and the reconciliation method. Most of the electric companies' comments criticized the proposed ten-year limit on recovery of all stranded costs other than nuclear decommissioning costs as confiscatory and incompatible with the Department's principle of near-term rate relief.

In response to the Department's request for suggestions and illustrative tariff proposals from electric companies and commenters on the rate structure method to be used to collect stranded costs, DOER proposed that stranded costs be recovered through a charge that has fixed and variable components (DOER, May 24, 1996 Comments, Section III, Tab B at 9). MEEC suggested that the design of the stranded cost charge should be based primarily on volumetric charges rather than fixed monthly charges (MEEC May 24, 1996 Comments at 15). BECo proposed that the stranded cost charge be collected solely through a fixed monthly charge (BECo May 24, 1996 Comments at 48).

Although most commenters felt that reconciliation of stranded cost recovery was a sound feature of our May 1 Statement, the use of bandwidths was criticized. Many stated that the bandwidths were too wide and allowed too much opportunity for gaming (COM/Electric May 24, 1996 Comments at 12; RAM May 24, 1996 Comments at 3; BECo May 24, 1996 Comments at 5). Other commenters claimed that the Department proposal to reconcile stranded cost recovery back to the edge of the bandwidth was also an imprudent policy (TEC May 24, 1996 Comments at 1; RAM May 24, 1996 Comments at 3). There was some disagreement on the proposed time frame for reconciliation, with a few commenters expressing the need to reconcile

more frequently (COM/Electric May 24, 1996 Comments at 13; AIM May 24, 1996 Comments at 33).

3. Current Department Proposal

With respect to recovery periods, the Department agrees with commenters that, for some electric companies, the requirement that all stranded costs be recovered within ten years could conflict with other objectives of the Department, including near-term rate relief, and we have deleted that requirement from the Model Rules presented herein at Appendix A. The Department must therefore determine the appropriate period over which to allow recovery of such costs, for the purpose of setting the stranded cost charge.

Traditionally, the Department has allowed the investment cost of a company's generating unit to be recovered over the economic life of the plant. In this manner, costs are collected over a time period that matches the expected delivery of benefits from the plant. The benefits of economic operation of a plant beyond the time when its costs have been fully recovered (i.e., its expected economic life), and savings related to the ability to repower or replace a facility on an existing site accrue to ratepayers. Consequently, the recovery of stranded costs over a specified period raises questions concerning how the benefits of plant ownership that will exist after a facility owner has fully recovered its costs from ratepayers through the stranded cost charge should be allocated between ratepayers and shareholders. The deregulation of generation and the introduction of competition will provide significant opportunities for electric companies to profit from generating facility equipment and sites that will have been paid for by ratepayers through the stranded cost charge.

In the May 1 Statement at 57-58, the Department stated its expectation that adoption of divestiture incentive mechanisms could help protect ratepayers "by addressing the significant residual value that companies would derive from continued ownership of generating units after they have recovered their allowed stranded costs." However, as noted in Section XI.E above, the Department has found it inappropriate at this time to adopt explicit mechanisms to encourage divestiture. In the absence of such mechanisms, the Department's current proposal addresses the issue of residual value by (1) proposing that beginning with the initial setting of the stranded cost charge, mitigation projections estimate the residual value of retained generation facilities as well as the expected income from plant operation (see Section XI.E, above), and (2) proposing that stranded costs associated with owned generation facilities, regulatory assets, and minimum power purchase obligations be collected over the expected economic life of the generating facility, the current amortization schedule of the regulatory asset, or the contractual term of the power purchase obligation, respectively.¹⁹² Further, the Department will review the economic benefits derived from any company non-T&D assets that have been paid for by ratepayers when conducting stranded cost charge reconciliations at years two, five, and ten.

The first step, then, in determining the stranded cost charge will be to divide the PV stranded cost number into the component categories of stranded costs, and assign collection of each over time periods consistent with the directives above.¹⁹³ For the purpose of this

¹⁹² As noted in Section XI.C above, we retain our proposal from the May 1 Rules that the projected costs for nuclear facility decommissioning be collected on the same schedule used in rates today.

¹⁹³ For example, this may be done by dividing the present value stranded cost estimate into
(continued...)

calculation, a company shall propose the return, if any, to use in such calculations.¹⁹⁴ At this time, the Department does not propose a particular method for doing these calculations; instead, we will review in company-specific proceedings the methods companies propose for spreading collection of stranded costs over time.

Next, we propose that companies apply current Department cost allocation and rate design principles in order to determine the KW and KWH charges necessary to recover the approved level of stranded costs. The Department proposes that these analyses conform to existing Department ratemaking standards, which prescribe methods of functionalization, classification, allocation, and design. The Department also expects companies to file rate impact analyses to ensure that the Department principles of rate continuity are not violated. Beyond these requirements, the Department will not further prescribe the methods to be used by companies in the design of the stranded cost charges. The Department will review in company-specific proceedings the application of cost allocation and rate design methods to ensure that they conform with the principles identified above.

Once the original stranded cost charges have been set pursuant to the requirements outlined in this section, the Department proposes to conduct periodic reviews of these charges in order to adjust them for deviations of actual market prices from those price projections used in

193(...continued)

the major categories of stranded costs in accordance with the percentage contribution of each to either overall embedded costs or stranded costs.

¹⁹⁴ Any return proposed by a company for the purpose of the stranded cost charge calculation shall comply with Department precedent and policy as discussed in Section XI.B, above.

the mitigation projections. As stated in Section XI.E, above, most parties expect market price projections to be a source of tremendous uncertainty in the calculation of stranded costs.

Accordingly, the Department reaffirms its proposal in the May 1 Statement to reconcile stranded cost recovery at the end of years two, five, and ten following the date of retail access for market projections that deviate from actual market price. These reconciliation periods will be necessary to protect both ratepayers and shareholders from the uncertainty inherent in forecasts of future market activity.

The Department agrees with commenters that the reconciliation bandwidths that were proposed in the May 1 Statement do not provide adequate protection for ratepayers and shareholders. Therefore, the Department's current proposal is to reconcile stranded costs in full at years two, five, and ten.¹⁹⁵

¹⁹⁵ As noted above, the Department also will review projections of residual value in stranded cost charge reconciliations.

SECTION XII -- OTHER TRANSITION ISSUES

The Department has stated, and here maintains, that the interests of ratepayers would best be served by an expedient and orderly transition from regulation to competition in the generation sector, in order to bring to ratepayers the benefits of competition as quickly as possible. In this section, the Department addresses two issues that arise in the transition to a competitive electricity market: labor impacts and rate unbundling.

With respect to labor impacts, electric industry restructuring may lead to the displacement of workers from their existing electric company jobs. The Department identifies two options that could mitigate adverse effects, and we encourage the appropriate entities to pursue them in order to facilitate a smooth transition to a new electric industry structure. The electric companies and their employees could negotiate a settlement of the outstanding labor issues or the Legislature could mandate a set of transition and termination provisions. Because this issue does not fall within the Department's statutory role of protecting ratepayer interests, the Department defers to the Legislature to balance the interests of ratepayers with those of any displaced workers in restructuring.

With respect to rate unbundling, consumers must be provided with useful information to guide their decisions in the transition to a competitive market. To this end, and pursuant to our authority under G.L. c. 164, §§ 76 and 94, the Department proposes to unbundle rates into their generation, transmission, and distribution components in order to provide consumers with transparent and accurate information regarding the price of electric services. Accordingly, the Department establishes a schedule and directives for electric companies to follow in unbundling their rates.

SECTION XII -- OTHER TRANSITION ISSUES

A. Labor Issues

1. Introduction

The electric utility industry in the Commonwealth of Massachusetts employs thousands of people. Those who commented on behalf of the electric company unions were concerned that electric industry restructuring will result in the loss of many of these jobs. They have asked that the Department's rules and our statutory proposal to the Legislature require electric companies to provide for certain basic benefits to displaced workers.

2. Issues Raised

The Massachusetts Alliance of Utility Unions ("MAUU") stated that approximately 3,500 jobs may be placed at risk by electric industry restructuring (MAUU Comments at November 6, 1996 Marstons Mills Public Hearing Tr. at 133). Local 464, Utility Workers Union of America, AFL-CIO and the Utility Workers Union of America, AFL-CIO ("Local 464") stated that the Department should recognize the need for workers to remain employed at generating facilities within the Commonwealth to retain jobs and to ensure the reliability and integrity of the electric system (D.P.U. 96-25, Restructuring Settlement Agreement for Massachusetts Electric Company ("Proposed MECo Settlement"), Local 464 October 29, 1996 Comments at 22).¹⁹⁶

The MAUU stated that performance-based regulation with a price cap would adversely affect the number and skill levels of the employees who would be employed by the electric industry (MAUU May 24, 1996 Comments at 3). MAUU stated that incentive regulation would

¹⁹⁶ Massachusetts Electric Company, D.P.U. 96-25, was incorporated by reference into this docket pursuant to D.P.U. 96-100, Order Commencing Notice of Inquiry ("NOI")/Rulemaking and Setting a Procedural Schedule at 5 (March 15, 1996).

result in a tension between a distribution company's desire to cut operating costs and its need to maintain a highly trained and highly skilled labor force (*id.* at 4). Therefore, MAUU asked that the Department include staffing levels and the amount of training that the average employee receives as factors in the development of any service quality index under performance-based ratemaking to ensure that staffing and training are maintained at appropriate levels (*id.*).

A number of commenters made proposals to lessen the adverse impact of any loss of jobs. MAUU recommended that the Department implement, both by rules and through our statutory proposal to the Legislature, the following benefits in the event of what it terms "stranded human investment": (1) severance pay in the amount of two weeks' pay for each full year of service with an electric company; (2) extended unemployment benefits for a period of fifty-two weeks; (3) continuation of health care coverage for a period of eighteen months, or until substantially equal coverage is provided by a new employer; and (4) full tuition waivers at state colleges and universities, or full tuition for vocational training for re-employment in the electric or other industry that would provide substantially equivalent earnings (*id.* at 2). MAUU stated that the costs of providing such benefits should be borne as part of a non-bypassable access charge that would be in place during the transition to a competitive market (*id.* at 3). Further, it stated that the Department should develop a procedure for certifying that displaced utility workers who qualify for such benefits have been laid off as the result of competition, or the prospect of impending competition brought on by changes in public policy (either a change to a competitive generating market or a price cap form of incentive regulation) (*id.* at 3).

Local 464 stated that to the extent that electric companies are allowed to recover the costs of what would otherwise be stranded plant investments, they should be entitled to recover

the cost of any stranded human investments (Proposed MECo Settlement, October 29, 1996 Comments at 22). Local 464 stated that the Department should either require the new owners of any divested generating plants to rehire the previous work force, or, as California has required of new owners of utility generating assets, contract with the previous owner to provide operations and maintenance services for the plants for a two-year transition period (*id.* at 23).¹⁹⁷ Further, Local 464 stated that current employees should be provided with severance, retraining, and unemployment benefits even if their separation from the generating plant occurs some time beyond the time of the sale (*id.* at 24). MAUU concurred and stated that the proposed restructuring settlement agreement for Massachusetts Electric Company did not sufficiently provide for the transition and termination needs of electric company employees:

We don't think that the [MECo] settlement agreement ought to be approved until there is a mechanism provided to make sure that those benefits are, in fact, provided for employees after the sale of the generating facilities, since in all likelihood, the most significant part of the downsizing will not happen before the sale, although some [downsizing] is contemplated. The majority [of any layoffs] will happen after [the sale], if this follows the pattern of other ways industries have been deregulated.

(MAUU Comments at November 6, 1996 Marstons Mills Public Hearing at 133).

3. Current Department Proposal

The primary objective of the Department's efforts in restructuring the electric industry is to reduce costs, over time, for all consumers of electricity. May 1 Statement at 8; D.P.U. 95-30,

¹⁹⁷ California Public Utilities Code, An Act Relating to Public Utilities, Chapter 2.3 Electrical Restructuring, Article 6 Requirements for the Public Utilities Commission, Section 363 states that the selling utility must contract with the purchaser of the facility and maintain the facility for at least two years (Proposed MECo Settlement, Local 464 October 29, 1996 Comments at 4).

at 13. This goal reflects the Department's historic mandate, to protect the interests of all ratepayers in the Commonwealth. The Department believes that the restructuring of the electric industry will result in lower costs for electricity, thereby fulfilling our statutory obligation.

With respect to the commenters' specific concern about the loss of jobs due to restructuring, it is not clear that restructuring will lead to an overall loss of jobs in the electric industry. As electric demand across the Commonwealth continues to grow and older, dirtier, less efficient and less competitive plants are replaced by new, clean, fuel-efficient, more competitive facilities, employment opportunities will shift. Moreover, lower energy costs may result in an increase in jobs, especially in those industries that are energy- intensive. In addition, energy loads and the need for capacity may increase as prices fall, which may also result in an increase in jobs in all industries. One of the objectives of restructuring is to bring energy costs down and improve the competitive position of the Massachusetts economy, which has, over the past two decades, lost hundreds of thousands of jobs, due, at least in part, to high energy costs.

There is, however, the possibility that the restructuring of the electric industry will result in the loss of specific electric utility jobs in certain existing facilities. In particular, generating plants which cannot provide electricity at competitive rates may be retired. In addition, utilities may sell their generating assets. However, new owners of generating assets will continue to need a skilled workforce to run the generating plants and new plants will be built which will require skilled labor. In addition, because of transmission constraints between New England and neighboring regions, it is likely that most of the electric capacity needs of the region will be supplied by plants located in New England. Implementation of pool-wide transmission pricing across New England pursuant to a mandate contained in FERC Order 888 will enhance the

incentive for generators to be built in the region. Further, if locationally-based pricing for transmission becomes the norm in the future, as the Department supports, there will be an even stronger incentive to build plants close to load centers. Therefore, electric generation will continue to be an important economic activity in the region.

Nonetheless, it may be appropriate to act to mitigate the adverse effects that electric industry restructuring might have on workers in some facilities. The Department is aware of two options to address the issue of displaced workers that have been advanced. The first option is derived from the Proposed MECo Settlement wherein the electric company proposes to collect in the stranded cost access charge all reasonable costs and expenses incurred by New England Power or its affiliates associated with the implementation of retail access, divestiture, or the termination of New England Power's Tariff No. 1, including but not limited to early retirement, severance, retraining and other reasonable costs. Proposed MECo Settlement at 60.

The second option is derived from the provision for transition and termination benefits included in California's restructuring legislation.¹⁹⁸ California has also addressed by statute the issue of workers' employment after the sale of a generating plant.¹⁹⁹

The Department encourages the electric companies and their employees to settle the labor issues associated with electric restructuring. We also encourage the Legislature to consider the

¹⁹⁸ The California statute provided, in relevant part, as follows:

In order to provide guidance in carrying out this chapter, the Legislature finds and declares all of the following:

(u) The transition to expanded customer choice, competitive markets, and performance-based ratemaking as described in Decision 95-12-063, as modified by Decision 96-01-009, of the Public Utilities Commission can produce hardships for employees who have dedicated their working lives to utility employment. It is preferable that any necessary reductions in the utility work force directly caused by electrical restructuring be accomplished through offers of voluntary severance, retraining, early retirement, outplacement, and related benefits. Whether work force reductions are voluntary or involuntary, reasonable costs associated with these sorts of benefits should be included in the competition transition charge.

California Public Utilities Code, An Act Relating to Public Utilities, Chapter 2.3 Electrical Restructuring, Article 1 General Provisions and Definitions, Section 330.

¹⁹⁹ (a) In order to ensure the continued safe and reliable operation of public utility electric generating facilities, the commission shall require in any proceeding under Section 851 involving the sale, but not spin-off, of a public utility electric generating facility, for transactions initiated prior to December 31, 2001, and approved by the commission by December 31, 2002, that the selling utility contract with the purchaser of the facility for the selling utility, an affiliate, or a successor corporation to operate and maintain the facility for at least two years. The commission may require these conditions to be met for transactions initiated on or after January 1, 2002. The commission shall require the contracts to be reasonable for both the seller and the buyer.

California Public Utilities Code, An Act Relating to Public Utilities, Chapter 2.3 Electrical Restructuring, Article 6 Requirements for the Public Utilities Commission, Section 363.

appropriateness of mandating a set of transition and termination provisions.²⁰⁰ At the same time, we note that our statutory mandate is to protect the interests of ratepayers. The welfare of displaced workers, a particular group of citizens, is the province of elected representatives because it requires a balancing of ratepayer interests with the interests of electric utility workers.

Therefore, the Department shall defer to the Legislature to determine whether transition and termination policies for electric utility workers should be legislated.

B. Rate Unbundling

The various rates that form the basis for customer bills today reflect a bundling of the costs of the different functional services provided by an electric company to customers, rather than specific charges for services provided in each functional category. Consistent with the current structure of the electric industry in which generation, transmission, and distribution services are provided as a combined monopoly service in the delivery of electricity, customers are billed for electricity through rate schedules that treat the delivery of electricity as a single, undifferentiated service. Introducing competition to the industry requires, as a necessary first step, that the different services that constitute electric service be made explicit to customers, and that consumers be exposed to separate pricing of those services. Consumers will then be able to choose among competing suppliers of those services. For at least the next several years, customers will be able to exercise choice only in selecting generation suppliers.

Accordingly, in D.P.U. 95-30, the Department identified the unbundling of rates as a necessary first step in the transition to a restructured electric industry, stating that such

²⁰⁰ In either event, any monies expended for this purpose could be collected as part of the access charge.

unbundling "is critical to provide both customers and competitors with the information they need to make decisions in a more competitive environment." Id. at 30, 39-40. In the May 1 Statement, the Department indicated that the unbundling of rates into their generation, transmission, and distribution components would serve to educate customers about the various services provided by their current electric companies and the pricing of these services. Id. at 50. The Department also concluded that it has authority under G.L. c. 164, §§ 76 and 94 to order the unbundling of electric rates. Id. at 40-43. Therefore, the Department directed all of the electric companies to develop revenue-neutral unbundled rates and set a schedule for the filing and implementation of those rates. Id. at 52.

The Department received few comments on the rate unbundling plan outlined in the May 1 Statement. In keeping with its principles and findings in the May 1 Statement, the Department remains committed to implementing rate unbundling for each electric company during 1997. However, it is appropriate to revise the schedule for implementing unbundled rates. Each electric company shall, by March 3, 1997, submit for Department review unbundled rates for implementation during 1997. Because the primary purpose of unbundling rates during 1997 is informational, rate unbundling should be accomplished in a manner that is revenue-neutral not only for the company as a whole, but also for each rate class.²⁰¹ Companies should unbundle rates based on the FERC Uniform System of Accounts.²⁰²

²⁰¹ This requires that, for each rate class, when the unbundled charges (customer, KWH, and KW) are summed, the total must equal that for the bundled charges currently in effect.

²⁰² We note that, by March 3, 1997, some electric companies may have reached agreement with the Department regarding the delineation of transmission and distribution facilities (continued...)

For rate unbundling to play a useful informational role for customers, customer bills for 1997 should, to the greatest extent possible, use a format that is anticipated to match the bills customers would receive after retail competition is introduced in 1998. Moreover, in order to minimize customer confusion as retail access is implemented, unbundled bills should employ a format and terminology consistent with the information that customers have received regarding unbundled bills.²⁰³ Specifically, the Department directs each company to develop and submit a proposed billing format that separately identifies and labels (1) generation charges, (2) transmission charges, (3) distribution charges, and (4) a general access charge.²⁰⁴ These charges may be separated into customer, energy, and demand components, as appropriate.

In the May 1 Statement, the Department endorsed the concept of billing customers during 1997 using proxies for market-based generation prices. Based on comments received in this proceeding and upon further consideration, the Department concludes that the informational benefits that could be obtained by implementing a billing mechanism that reflects proxy prices

²⁰²(...continued)

using the seven criteria outlined by the FERC in Order 888. In this circumstance, the distribution portion of the unbundling filing shall reflect current distribution assets and rates consistent with such agreement.

²⁰³ Throughout the period that this docket has been open, the Department has described to consumers the context within which unbundling would occur. Such presentations have been made in the public meetings and other presentations in public forums, and in pamphlets distributed by each electric company.

²⁰⁴ Each electric company shall submit a proposal that assigns fuel charge costs to the "generation charge" rate, and other generation costs to the general access charge. However, the Department remains open to suggestions as to how best to separate generation costs in a manner that will ensure revenue neutrality and be similar to what customers will see on their bills in 1998. We welcome suggestions on how best to format bills, consistent with stated objectives, during the transition period.

for generation can be achieved without having bills calculated as a function of proxy prices.

Therefore, electric companies will not be required to implement such a pricing scheme during 1997. However, the Department directs each electric company to include in its rate unbundling filing a proposal to provide customers with proxy market prices for generation for informational purposes.

APPENDIX A MODEL RULES

Introduction

Consistent with the legislative proposal, attached as Appendix B, the Department proposes a set of Model Rules to govern the restructuring of the electric industry and to apply thereafter to the restructured electric industry. The Model Rules provide a regulatory framework for an efficient industry structure that will minimize long-term costs to consumers while maintaining the safety and reliability of electric services with minimum impact on the environment.

The Model Rules include the following sections: Purpose and Scope; General Definitions; Stranded Costs; Distribution Company Function; Competitive Supplier Requirements; Renewable Resources; Energy Efficiency; and Exceptions.

It is the Department's intention to adopt the sections of these rules that fall under our current authority as part of this rulemaking. The Department will move forward with adoption of the remaining sections, for which we believe we need additional statutory authority, after the Legislature has acted on the legislative proposal. We reiterate our intention to do everything within our authority to implement customer choice by January 1, 1998.

220 CMR 11.00: RULES GOVERNING THE RESTRUCTURING OF THE ELECTRIC INDUSTRY IN THE COMMONWEALTH OF MASSACHUSETTS

Section

- 11.01: Purpose and Scope
- 11.02: General Definitions
- 11.03: Stranded Costs
- 11.04: Distribution Company Functions
- 11.05: Competitive Supplier Requirements
- 11.06: Renewable Resources
- 11.07: Energy Efficiency
- 11.08: Exceptions

11.01: Purpose and Scope

(1) Purpose. 220 CMR 11.00 establishes the rules that will govern the restructuring of the electric industry and will apply thereafter to the restructured electric industry in the Commonwealth of Massachusetts. Their purpose is to provide a regulatory framework for an efficient industry structure that will minimize long-term costs to consumers while maintaining the safety and reliability of electric services with minimum impact on the environment.

(2) Scope. 220 CMR 11.00 applies to the distribution companies, power marketers and brokers, and competitive suppliers that will participate in the electric industry in Massachusetts following the effective date of these rules, including the following investor-owned electric companies and their successors or assigns:

- a. Boston Edison Company
- b. Cambridge Electric Light Company
- c. Commonwealth Electric Company
- d. Eastern Edison Company
- e. Fitchburg Gas and Electric Light Company
- f. Massachusetts Electric Company
- g. Nantucket Electric Company
- h. Western Massachusetts Electric Company

11.02: General Definitions

The terms set forth below shall be defined as follows, unless the context otherwise requires.

Aggregator shall mean an entity that groups electricity customers.

Capacity shall mean the load for which a generating unit, generating station, or other electrical apparatus is rated either by the user or by the manufacturer.

Competitive Supplier shall mean any entity, including aggregators, engaged in generating, buying, marketing, or brokering electricity and selling it to retail customers in Massachusetts, with the exception of a Distribution Company providing Standard Offer Generation Service and Default Generation Service to its distribution customers.

Department shall mean the Department of Public Utilities.

Distribution shall mean the delivery of power over lines that operate at a voltage level typically equal to or greater than 110 volts and less than 69,000 volts to an end-use customer within Massachusetts. The Distribution of electricity is subject to the jurisdiction of the Department.

Distribution Company shall mean an Electric Company organized under the laws of the Commonwealth of Massachusetts that provides Distribution Service in Massachusetts.

Distribution Customer shall mean a recipient of Distribution Service, as provided by a Distribution Company.

Distribution Service shall mean the Distribution of electricity and other related services, e.g., metering and billing.

Electric Company shall mean an investor-owned electric utility that provides Generation, Transmission, or Distribution Service. This definition applies to the electric companies listed in Section 11.01(2).

Energy shall mean the amount of electricity used over a period of time, typically measured in kilowatthours.

Energy Efficiency shall mean the application of the least amount of energy required to produce a desired output.

General Access Charge shall mean the charge that provides the mechanism by which a Distribution Company will collect the costs for public policy initiatives, including discounts for Low-income Customers, and for programs such as Energy Efficiency and Renewables.

Generation shall mean the act or process of transforming other forms of energy into electric energy, or the amount of electric energy so produced.

Generation Customer shall mean a user of Generation.

Renewables shall mean those renewable energy sources or emerging technologies that are relatively immature but have significant potential for commercialization in New England, and

shall include solar and wind power projects, fuel cells and biomass (limited to dedicated fuel stock cultivation, except wood).

Transmission shall mean the delivery of power over lines that operate at a voltage level typically equal to or greater than 69,000 volts from generating units across interconnected high voltage lines to where it enters a distribution system. The transmission of electricity is subject to the jurisdiction of the FERC.

11.03: Stranded Cost Recovery

(1) Purpose and Scope.

(a) Purpose. The purpose of this section is (1) to specify the information that shall be presented by an Electric Company in its Stranded Cost filing for Department review of Stranded Cost calculations; (2) to establish the procedures by which an Electric Company shall calculate net, non-mitigable Stranded Costs; (3) to set forth the procedure for Department adjudication of Stranded Cost calculations; and (4) to outline the mechanisms by which Stranded Costs may be collected over time.

(b) Scope. Section 11.03 applies to the electric companies listed in Section 11.01(2).

(2) Specific Definitions.

Embedded Costs shall mean the costs of assets and obligations incurred by an Electric Company prior to August 16, 1995, pursuant to the provision of electric service, including (1) the amount of the net depreciated book costs directly related to existing generating facilities that are wholly or partly owned by the company, (2) the minimum financial obligation under existing long-term power purchase agreements, (3) the amount of the reported book balances associated with Department-approved regulatory assets related to Generation, and (4) the amount of costs that will be required to decommission nuclear generating facilities.

Mitigation shall mean all actions or occurrences that reduce the amount of money that an Electric Company would need to collect over time through the Stranded Cost Access Charge in order to recover its Embedded Costs, including those resulting from both matters within the company's control (e.g., asset sales) and matters not wholly within the company's control. Mitigation includes, but is not limited to, (1) sales of market commodities (e.g., capacity, energy, reserves, automatic generation control, and emission allowances) from generating facilities that are wholly or partly owned by the company; (2) sales of market commodities (e.g., capacity, energy, reserves, automatic generation control, and emission allowances) from generating facilities with which the company has a power purchase agreement; (3) adjustments to the company's minimum obligations under power

purchase agreements that decrease such obligations, such as those that may be obtained through contract buy-out or renegotiation; (4) Residual Value; and (5) sales and voluntary writedowns of company assets.

Residual Value shall mean the value of Electric Company assets, not including the income that may be obtained through generating facility operation.

Stranded Cost Access Charge shall mean the charge that provides the mechanism for recovery of an Electric Company's Stranded Costs.

Stranded Costs shall mean the Embedded Costs that remain after accounting for maximum possible Mitigation of such costs. Stranded Costs shall be calculated as set forth in Section 11.03(3).

(3) The Calculation of, and Mechanisms for the Recovery of, Stranded Costs by Investor-Owned Electric Companies.

(a) Documents to be Filed. Each Electric Company's Stranded Cost filing shall contain the following summary documents, which shall be submitted in paper and electronic format. Text and tables shall be submitted on a diskette in a format to be determined by the Department. Each summary document shall contain all of the information identified in the associated section below. Where the information required below is not applicable, the company shall include in the summary document a detailed explanation as to the reason(s) the requirement is not applicable. The Department will review each filing to determine if the filing requirements are met. Incomplete filings may be rejected by the Department.

- (i) Executive Summary. The Executive Summary shall be a non-technical text and tables that provide an overview of the information contained in the following

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ents.

(ii) Embedded Costs Summary.

1. The company shall present Embedded Costs for the following four categories: (a) the amount of the net depreciated book costs directly related to generating facilities that are wholly or partly owned by the company; (b) the minimum financial obligations under existing long-term power purchase contracts; (c) the amount of the reported book balances associated with Department-approved regulatory assets related to Generation; and (d) the amount of costs that will be required to decommission nuclear generating facilities.

2. The company shall present the net depreciated book costs of owned generating facilities (a) by plant, (b) aggregated by fuel type, and (c) in total. The company shall identify the retirement date for each facility (a) anticipated at the time the facility began operation, (b) projected in the company's most recent integrated resource management or integrated resource plan filing submitted prior to the publication of these rules, and (c) assumed for the purpose of setting rates in effect as of the effective date of these rules (if different from (a)). The company shall describe any technical or economic barriers to operation of the facility beyond the latest of the retirement dates identified above.

3. The company shall present minimum power purchase agreement obligations (a) by generating facility or agreement, (b) aggregated by fuel type, and (c) in total. For each power purchase agreement obligation, the company (a) shall submit a copy of the agreement and all amendments, (b) shall identify and summarize all agreement provisions that relate to the term of and the company's financial obligations under such agreement, and shall demonstrate how the minimum obligation under the agreement is estimated, (c) shall identify and summarize all agreement provisions that relate to actions or circumstances under which the agreement could or would be terminated, amended, or renegotiated, and (d) shall identify and summarize all Department Orders approving or otherwise relating to the agreement.

4. The company shall provide the most recent decommissioning cost study available for each nuclear generating facility for which the company is seeking recovery of projected decommissioning costs. The company shall estimate what portion of the nuclear decommissioning cost estimate derives from the future operation of the generating facility. The company shall

demonstrate how such estimate is calculated, and shall identify and summarize each portion of the decommissioning cost study relevant to such calculation.

5. The company's presentation for each category of Embedded Costs shall include a presentation of such information as it was reported in the company's FERC Form 1 filings beginning with the year 1994. For each component of Embedded Costs, the company shall identify the corresponding page and line number(s) from FERC Form 1.

6. All adjustments in the company's presentation of Embedded Costs from the values presented in the most recent FERC Form 1 filing shall be accompanied by a description of the reasons for, and method of calculating, such adjustments.

(iii) Mitigation Summary.

1. The company shall present estimates of Mitigation of Embedded Costs for at least the following five categories: (a) net income (revenue less operating expenses) from sales of market commodities (e.g., capacity, energy, reserves, automatic generation control, and emission allowances) from generating facilities that are wholly or partly owned by the company (by facility and in total); (b) net income from sales of market commodities (e.g., capacity, energy, reserves, automatic generation control, and emission allowances) from generating facilities with which the company has power purchase agreements (by agreement and in total); (c) adjustments to the company's minimum obligations under power purchase agreements that decrease such obligations, such as may be obtained through contract termination, buy-out, or renegotiation; (d) Residual Value; and (e) sales and voluntary writedowns of company assets. The company shall include other categories for the Mitigation of Embedded Costs as appropriate. The company shall present a total of all Mitigation estimates provided.

2. The company shall present estimates of Mitigation of Embedded Costs on a present-value basis (a) in total, and (b) on an annual basis over the period for which Mitigation estimates are presented. The company shall state its assumptions and provide details of its calculations of present value.

3. The company shall provide a summary of, and the basis for, all projected market prices used in Mitigation estimates. Projections of market price shall attempt to estimate what the region-wide clearing price for market commodities will be in a fully competitive generation market.

4. The company shall include in its Mitigation projection estimates of net income from sales of market commodities (e.g., capacity, energy, reserves, automatic generation control, and emission allowances) each wholly or partly owned generating facility for the expected life of the facility. In support of this estimate, the company shall provide projections of generating facility annual output and life expectancy. The company shall provide support for any projections of generating facility operation and maintenance costs used in this estimate. The company shall not include estimates of net income for any period in which such values are negative.

5. The company shall include in its Mitigation projection estimates of the Residual Value of generating facilities and all other property not classified to the Transmission or Distribution function.

6. The company shall include in its Mitigation projection estimates of net income from sales of market commodities (e.g., capacity, energy, reserves, automatic generation control, and emission allowances) from generation facilities with which the company has power purchase agreements, for the term of the company's purchase under each agreement. In support of this estimate, the company shall provide projections of generating facility annual output.

7. In support of its summary of opportunities to decrease its total costs or obligations under existing power purchase agreements through contract termination, buy-out, or renegotiation, the company shall provide a description of all such efforts that have been undertaken, are underway, or are expected to be taken as of the time of filing.

8. In support of its opportunities for and possible timing of expected sales of company assets, the company shall explain how such sales would affect the Stranded Cost calculation.

9. The company shall be required to undertake all possible steps to maximize net revenues from the operation of its own generating facilities, power purchase agreements, and other assets, and shall provide evidence to the Department of all such efforts.

(iv) Stranded Costs Summary.

1. The company shall calculate Stranded Costs by subtracting Mitigation projections from Embedded Costs.

2. The company shall present a calculation of Stranded Costs on a present-value basis in total for the company. The company shall also separate the present-value estimate of Stranded Costs into those attributable to (a) specific generating facilities, (b) specific

power purchase agreements, (c) regulatory assets, (d) nuclear decommissioning, and (e) other. The company shall state its assumptions and provide details of its calculation of present value.

3. In addition to the present-value calculation set forth in Section 11.03(3)(a)(iv)2, the company shall present estimates of Stranded Costs in terms of (a) total dollars, and (b) cents per kilowatthour, assuming that the collection of Stranded Costs will occur over periods consistent with the depreciation and amortization periods underlying rates in effect as of the effective date of these rules, and the terms of power purchase contracts. The company shall summarize the method and assumptions used in the cent-per-kilowatthour calculation.

4. In support of the calculation presented in Section 11.03(3)(a)(iv)3, the company shall identify and justify the return, if any, used in such calculation.

5. The company shall present sensitivity analyses that demonstrate the variability of the Stranded Cost calculation in response to changes in key assumptions and projections. At a minimum, such sensitivity analyses shall be conducted for (a) projections of the prices for market commodities, (b) assumptions regarding generating facility output, (c) assumptions regarding generating facility variable operating costs, including fuel costs, (d) estimates of Residual Value, and (e) combinations of the factors in (a) through (d). The company shall include additional sensitivity analyses as appropriate.

(v) Summary of the Mechanism for the Collection of Stranded Costs.

1. The company shall propose a Stranded Cost Access Charge for the recovery of Stranded Costs that is consistent with existing methods of cost functionalization, classification, allocation, and rate design for each rate class.

2. The company shall propose a Stranded Cost Access Charge that may have fixed and variable components. The company shall describe the basis for its design of the fixed and variable components of the Stranded Cost Access Charge.

3. The company shall recover Stranded Costs through the Stranded Cost Access Charge as approved by the Department.

(4) Department Review of Stranded Cost Presentations.

(a) The Department will review company presentations of Stranded Cost calculations and mechanisms, will reject inadequate filings, and may approve, reject, or require adjustments to the Stranded Cost calculations or mechanisms.

(b) The Department may require compliance filings by a company to implement any changes ordered by the Department upon review of the company's presentation. Compliance filings shall be due within 30 days of the Department's order.

(c) At intervals two, five, and ten years subsequent to the date upon which the Stranded Cost Access Charge is implemented, each company shall propose an adjustment to the Stranded Cost Access Charge in order to reconcile the charge to the difference between projections of the prices of market commodities approved by the Department and actual prices of market commodities. The Department shall review the above, and may approve or order changes to the company's proposed adjustment to the Stranded Cost Access Charge.

11.04: Distribution Company Functions

(1) Purpose and Scope.

(a) Purpose. This Section establishes the rules of procedure by which Distribution Companies shall (1) provide Distribution Service to residential and non-residential customers in their service territories, (2) provide service to Low-income Customers in their service territories, (3) make Generation available to residential and non-residential customers in their service territories who are not receiving Generation from a Competitive Supplier, (4) bill customers for the Generation, Transmission, and Distribution Service that the customers in their service territories receive, and (5) terminate electric service to customers for non-payment of bills.

(b) Scope. These rules apply to all Distribution Companies subject to the jurisdiction of the Department.

(2) Specific Definitions.

Bill shall mean a written statement from a Distribution Company or a Competitive Supplier to its customer setting forth, for the billing period identified in the Distribution Company's tariff, (a) the amount of electricity consumed or estimated to have been consumed, (b) charges for Generation, Transmission, and Distribution Services, as appropriate, (c) the Stranded Cost Access Charge and General Access Charge, as appropriate, and (c) any other charges approved by the Department.

Competitive Generation Customers shall mean those customers who receive Generation from a Competitive Supplier.

Default Generation Customers shall mean those customers who receive Default Generation Service.

Default Generation Service shall mean the Generation Service made available by Distribution Companies to (a) customers who are former Competitive Generation Customers who, for any reason, have stopped receiving Generation Service from Competitive Suppliers; (b) Standard Offer Generation Customers as of the date that Standard Offer Generation Service is terminated who do not subsequently receive Generation from Competitive Suppliers; or (c) customers who move into a Distribution Company's service territory after the retail access date who are not receiving Generation from Competitive Suppliers.

Interconnection Standards shall mean any criteria that govern the connection of Generation sources to a Distribution system.

Low-income Customers shall mean those customers who meet the low-income eligibility qualifications approved by the Department for each Distribution Company.

Low-income Customer Tariff shall mean a tariff offered by a Distribution Company to its Low-income Customers that provides a rate discount for these customers.

Retail Access Date shall mean the date on which retail consumers of electricity are first provided the opportunity to purchase Generation from Competitive Suppliers.

Standard Offer Generation Customers shall mean those customers who receive Standard Offer Generation Service.

Standard Offer Generation Service shall mean the Generation Service made available by Distribution Companies to those customers who, since the retail access date, have not received Generation from a Competitive Supplier.

(3) Distribution Service.

- (a) Each Distribution Company shall be required to connect all customers within its service territory to its distribution system pursuant to the terms set forth in 220 CMR 25.02.
- (b) Each Distribution Company shall file, for Department approval, a Distribution Service tariff for each rate class
- (c) Each Distribution Company shall file, for Department approval, terms and conditions that will govern the manner in which Distribution Service is provided to its customers.
- (d) Each Distribution Company shall provide Distribution Service in a least-cost manner.

(e) Each Distribution Company shall establish non-discriminatory Interconnection Standards by so that all Generation sources, including Renewables, have access to its Distribution system in order to sell power into the energy market, directly to customers, or to Competitive Suppliers. The Interconnection Standards shall be approved by the Department.

(4) Low-income Customer Tariff.

(a) Each Distribution Company shall be required to file a Low-income Customer Tariff that shall provide a level of discount for Low-income Customers that is equivalent to the discount provided under each Electric Company's low-income tariff as of the effective date of these regulations. The discount shall be provided to Low-income Customers through each company's Distribution rates and Stranded Cost Access Charge.

(b) Each Distribution Company shall determine customer eligibility for its Low-income Customer Tariff based on the qualifications approved by the Department for the company.

(c) Each Distribution Company shall allocate to other rate classes the projected revenue deficiency resulting from the Low-income Customer Tariff using an allocation method approved by the Department for the company.

(d) Each Distribution Company shall recover the low-income deficiency allocated to each rate class via the General Access Charge.

(5) Generation Service.

(a) Each Distribution Company shall have the obligation to make Standard Offer Generation Service and Default Generation Service available to customers within its service territory who are not receiving Generation from a Competitive Supplier, consistent with the provisions set forth in Section 11.04(5)(b) and (c), and 220 CMR 25.02.

(b) Standard Offer Generation Service.

1. Each Distribution Company shall make Standard Offer Generation Service available to each customer within its service territory who, since the Retail Access Date, has not received Generation from a Competitive Supplier.

2. Standard Offer Generation Service shall be available on a one-time basis to customers for a maximum of five years or otherwise determined after the Retail Access Date. Customers entering a Distribution

Company's service territory after the Retail Access Date are not eligible for Standard Offer Generation Service. These customers may receive Generation from the Distribution Company only by means of Default Generation Service.

3. Each Distribution Company shall file, for Department approval, the prices that customers shall be charged for Standard Offer Generation Service during each year that this service is available.

4. Each Distribution Company shall file, for Department approval, terms and conditions that will govern Standard Offer Generation Service.

(c) Default Generation Service.

1. Each Distribution Company shall provide Default Generation Service to (a) former Competitive Generation Customers who, for any reason, have stopped receiving Generation from Competitive Suppliers; (b) customers entering the Distribution Company's service territory after the Retail Access Date who are not Competitive Generation Customers; or (c) Standard Offer Generation Customers as of the date that Standard Offer Generation Service is terminated who do not subsequently receive Generation from Competitive Suppliers.

2. Each Distribution Company shall provide Default Generation Service to a Default Generation Customer until such time as the customer becomes a Competitive Generation Customer.

3. Each Distribution Company shall file, for Department approval, terms and conditions that will govern the manner in which Default Generation Service is provided to its customers.

4. Prices for Default Generation Service shall reflect the average regional market prices for the relevant billing period.

(6) Billing and Payment.

(a) Each Distribution Company shall bill its residential customers in accordance with the Billing and Termination Procedures set forth at 220 CMR 25.00.

(b) Each Distribution Company shall issue a single bill for electric service to all customers in its service territory, except that Competitive Generation Customers may request that Competitive Suppliers provide separate bills for Generation.

(c) Each Distribution Company shall file, for Department approval, terms and conditions that will govern the relationship between the Distribution Company and Competitive Suppliers providing Generation to consumers in the Distribution Company's service territory. These terms and conditions shall, at a minimum, describe the manner in which (i) the Distribution Company will provide consumers' metered electricity consumption data to Competitive Suppliers, (ii) Competitive Suppliers will provide Generation pricing information to the Distribution Company, and (iii) Generation revenue will be transferred from the Distribution Company to Competitive Suppliers, where the Distribution Company bills Competitive Generation Customers for Generation on behalf of Competitive Suppliers.

(d) Each Distribution Company may recover bad debt expenses associated with Distribution Service, Standard Offer Generation Service and Default Generation Service incurred as a result of customers' failure to pay. The amount and method of recovery of such expenses shall be established by the Department in a general rate case.

(e) Each Distribution Company may, as appropriate, require a security deposit from, and impose late payment charges on, commercial and industrial customers in accordance with the terms set forth at 220 CMR 26.00.

(7) Termination Protections.

(a) All residential customers shall be protected from termination of electric service pursuant to 220 CMR 25.00.

(b) Each Distribution Company shall remain responsible for determining eligibility for termination protections pursuant to 220 CMR 25.00 and for administering such protections for customers within its service territory.

11.05: Competitive Supplier Requirements

(1) Purpose and Scope.

a) Purpose. The purpose of this Section is to establish the requirements applicable to any Competitive Supplier.

(b) Scope. This Section applies to all Competitive Suppliers doing business in Massachusetts.

(2) Registration Requirements. At least thirty days before initiating the provision of Generation to retail customers, each Competitive Supplier shall file with the Department's Secretary a notarized document that includes the information

identified below, and pay an annual fee of five hundred dollars to the Department. Updated information shall be filed with the Department in response to any material change to the information on file.

- (a) Legal name;
 - (b) Business address;
 - (c) If corporation or association, (i) the name of the state where organized, (ii) the date of organization, (iii) a copy of the Articles of Incorporation or Association, and (iv) the name, address and title of each officer and director;
 - (d) Name, title, and an 800 or toll-free telephone number of customer service department or contact person available to customers;
 - (e) Name, title, and telephone number of regulatory contact person;
 - (f) Brief description of the nature of business being conducted; and
 - (g) Evidence of financial soundness. Different types of assurances (e.g., a recent financial statement, a letter of credit, or a surety bond) may be accepted, to be determined on a case-by-case basis.
- (3) Billing Regulations. Each Competitive Supplier shall comply with the Department's billing regulations set forth in 220 CMR 25.00 when issuing bills directly to customers.
- (4) Customer Authorization. Each Competitive Supplier wishing to provide a customer with Generation shall obtain that customer's written (or other verifiable) authorization before providing Generation and shall preserve such authorization in its files for one year. The following means of obtaining authorization are acceptable: (a) written authorization; (b) electronic authorization, such as a voice response unit; (c) a qualified and independent third party operating in a physically separate location from the Competitive Supplier may obtain oral authorization, including appropriate verification data such as Social Security number; or (d) the new customer may be sent an information package that includes information such as a statement that the information is being sent to confirm the telemarketing order, the name of the newly requested carrier, a description of price and other terms, a postpaid card that the customer may use to confirm, deny or cancel a service order, and a contact number for consumer complaints.
- (5) Information Disclosure Requirements. Each Competitive Supplier shall provide specific information in a consistent format to their prospective and existing customers regarding the mix of resources, including the generation sources, associated air emissions, and price. Such information shall be updated quarterly. In addition, all contracts offered to and signed by Massachusetts customers and all bills will:
- (i) be written in plain, simple language;
 - (ii) contain clearly distinguishable rates and terms of service;

- (iii) identify a dispute resolution process that is available if the customer is not satisfied with the service;
 - (iv) include the Department's Consumer Division telephone number;
 - (v) include a provision giving customers 10 days' prior notice of discontinuance of the supply of electricity; and
 - (vi) explain that the customer must notify the Competitive Supplier and Distribution Company if the customer chooses to terminate service.
- (6) Consumer Complaint Record-keeping Requirement. Competitive Suppliers are required to maintain a record for three years of all consumer complaints received by them. This record must be filed with the Department annually.
- (7) Sanctions. Each Competitive Supplier doing business in the Massachusetts shall be subject to a range of sanctions for violations of the Department's billing regulations (when directly issuing bills to customers) and Competitive Supplier requirements. Such sanctions may only be imposed following a hearing before the Department in conformance with G.L. c. 30A and 220 CMR 25.00. The Department may impose fines ranging from fifty to five hundred dollars. In the case of egregious conduct or a pattern of misconduct, the Department may determine that a Competitive Supplier is on probation or no longer in good standing with the Department. Such determinations may result in the Competitive Supplier being (i) required to notify existing and prospective customers of probationary status; (ii) prohibited from signing up new customers for a specified period of time; or (iii) struck from the list of approved Competitive Suppliers maintained by the Department. Distribution companies may do business (i.e., provide to the Competitive Supplier and system operator the customer consumption information necessary for the Competitive Supplier to do billing) only with Competitive Suppliers on the list of approved Competitive Suppliers maintained by the Department.

11.06: Renewables

- (1) Purpose and Scope.
 - (a) Purpose. The purpose of this Section is to establish the terms and conditions by which the Department's goals of customer choice, minimal environmental impact, and resource diversity will be advanced in a restructured electric industry through the availability to customers of energy from Renewables.
 - (b) Scope. This Section applies to all Distribution Companies.
- (2) Specific Definitions.

Renewables Fund shall mean the sum of monies collected from customers of a Distribution Company via the General Access Charge that are available to be distributed to Renewables providers to offset some or all of the difference between the price of power from emerging and renewable energy technologies and the price that customers are willing to pay for power from Renewables.

(3) Funding of Renewables. A charge shall be established by the Department, beginning January 1, 1998 at one mill per kilowatthour (\$0.001) to be modified from time to time upon review by the Department, to support the Renewables Fund. This charge shall be part of the General Access Charge collected by the Distribution Company.

(4) Availability of Information. Each Distribution Company shall make any and all non-proprietary information that it has obtained on renewable and emerging energy technologies available to its customers.

(5) Net Metering. A customer of a Distribution Company with an on-site Generation source of 30 kilowatts or less in size has the option to run the meter backward and may choose to receive a credit from the Distribution Company equal to the average market price of generation per kilowatthour in any month during which there was a positive net difference between kilowatthours generated and consumed. Such credit would appear on the following month's bill. Distribution companies shall be prohibited from imposing special fees on net metering customers, such as backup charges and demand charges, or additional controls, or liability insurance, as long as the Generation source meets the Interconnection Standards and all relevant safety and power quality standards. Net metering customers must still pay the minimum charge for Distribution Service (as shown in an appropriate rate schedule on file with the Department) and all charges for each kilowatthour delivered by the Distribution Company in each billing period.

11.07: Energy Efficiency

(1) Purpose and Scope.

(a) Purpose. This Section establishes the rules by which each Distribution Company shall provide Energy Efficiency services to its customers.

(b) Scope. This Section applies to all Distribution Companies.

(2) Specific Definitions.

Demand-side Management ("DSM") shall mean any technology, measure, or action designed to decrease the kilowatt or kilowatthour use, or alter the time pattern of that use, by consumers of electricity.

Energy Efficiency Plan shall mean a proposal by a Distribution Company to provide DSM and to participate in other Energy Efficiency initiatives.

Market-Driven Energy Efficiency shall mean Energy Efficiency efforts designed to take advantage of opportunities for more efficient use of energy at the time when it is most practical and inexpensive to do so, such as during new construction, renovation, equipment replacement, or at the time of purchase of new equipment.

Market Transformation Initiatives shall mean strategic efforts to offset market failures and to induce lasting structural or behavioral changes that result in increases in the adoption or penetration of energy efficient technologies or practices.

Weatherization Assistance Program ("WAP") Agency shall mean an entity charged with the implementation of energy efficiency direct installation programs that provide weatherization services and other measures to reduce energy use by Low-income Customers.

(3) Filing Requirements. Each Distribution Company shall file a proposed Energy Efficiency Plan with the Department at the time it files its first conservation charge filing subsequent to the effective date of these rules. Each Energy Efficiency Plan shall extend for a period of five years, and shall consist of a detailed plan for two years, and a projected plan for the following three years. At least 90 days prior to the expiration of the initial two-year period, each Distribution Company shall file a detailed plan for the subsequent three years of the five-year period covered by the Energy Efficiency Plan.

(4) Department Review. The Department shall review the Energy Efficiency Plan at the time of each filing to determine the extent to which the Energy Efficiency Plan reduces market barriers to Energy Efficiency, and to determine the level of cost recovery appropriate to fund the Energy Efficiency Plan. The Department shall approve such Energy Efficiency Plan, or order such changes to the Plan as are necessary to achieve the purpose of this Section.

(5) Content of Energy Efficiency Plans. Each Distribution Company's Energy Efficiency Plan shall include:

- (a) An educational component that seeks to ensure that customers have adequate information about Energy Efficiency for informed decisionmaking;
- (b) A proposal for support of regional or national Energy Efficiency Market Transformation Initiatives to the extent that they can provide benefits to the company's customers;
- (c) A description of the evolution of the company's DSM programs to market-driven efforts during the years covered by the Plan;

- (d) A description of evaluation criteria appropriate to the Energy Efficiency measures and the Market Transformation Initiatives included in the company's Energy Efficiency Plan; and
 - (e) A proposal for the company to coordinate delivery of Energy Efficiency services to Low-income Customers with the local WAP agencies and other appropriate entities that serve the low-income population in the company's service territory.
- (6) Funding of Energy Efficiency Services. Energy Efficiency services provided by a Distribution Company to customers shall be funded through the General Access Charge.
- (7) Availability of Information.
- (a) Each Distribution Company shall make any and all non-proprietary information that it has obtained regarding energy efficiency technologies, measures, or practices available to the public.
 - (b) Each Distribution Company is obligated to comply with the provisions of 220 C.M.R. 12.03(9) regarding provision of information, which applies to information on Energy Efficiency. Each Distribution Company shall make provisions for those customers who indicate that their customer-specific energy efficiency information is to remain confidential.
 - (c) Each Distribution Company shall file a biennial report detailing Energy Efficiency activities and results, in accordance with Department directives.

11.08: Exceptions

Upon motion, the Department may grant, where appropriate, an exception to any provision of Section 11.00. The Department may act upon its own motion in granting such exception.

REGULATORY AUTHORITY

220 CMR 11.00: M.G.L. c. 164, §§ 69I, 76, 94

APPENDIX B
PROPOSED LEGISLATION

Introduction

The present statutory construct pursuant to Chapter 164 of the General Laws envisions a system of vertically-integrated electric companies that provide generation, transmission, and distribution services to defined service territories. The Department's proposal for a restructured electric industry that provides for customer choice of electricity supplier cannot be clearly implied from the existing legislation. Therefore, an additional grant of authority from the Legislature is required in order to remove any uncertainty regarding the Department's authority to promulgate rules consistent with its restructuring proposal.

The following proposed legislation amends Chapter 164 of the General Laws to clarify the Department's authority to provide the opportunity for retail customer choice in electric supply. The proposed legislation includes Sections on Definitions, Statement of Purpose, Principles for a Restructured Electric Industry, Implementation, Regional Concerns, and specific amendments to numerous sections of Chapter 164. In addition, several separate utility assessments are consolidated.

The Department respectfully urges the Legislature to consider this proposed legislation in the upcoming session. We pledge our full cooperation in this effort and look forward to assisting the Legislature in pursuing the public interest by providing the citizens of Massachusetts with the freedom of choice of electric supplier and with the benefits of competition.

Title: An Act Restructuring the Electric Industry in Massachusetts

Sponsor: D.P.U.

Statutes Changed: G.L. c. 164, §§ 1, 2, 47A (added), 69I, 78, 79, 87, 92, 92A, 94, 94A, 94G, 94G1/2, 95, 125A, 128, and G.L. c. 25, §§ 12M, 17, 17A, 18; § 89 of chapter 233 of the Acts of 1983

Legislative History: New Bill

Summary: Currently, G.L. c. 164 is applied to and interpreted within a system of vertically-integrated electric companies that provide generation, transmission, and distribution services to defined services territories. This bill amends G.L. c. 164 to clarify the department's authority to create the opportunity for retail customer choice in electric supply. In addition this bill consolidates several assessments for various specific purposes into one general assessment and one specific assessment. Also, special assessments for other agencies are transferred to those agencies. A section-by-section analysis follows:

SECTION 1. This section adds the definition of aggregator.

SECTION 2. This section adds the definition of ancillary services.

SECTION 3. This section adds the definitions of distribution and distribution service.

SECTION 4. This section amends the definition of electric company.

SECTION 5. This section adds the definitions of electric service, embedded costs, energy efficiency, and Federal Energy Regulatory Commission.

SECTION 6. This section adds the definitions of general access charge, generation, generation service, horizontal market power, and mitigation.

SECTION 7. This section adds the definitions of renewables and residual value.

SECTION 8. This section adds the definitions of stranded costs, stranded cost access charge, and supplier.

SECTION 9. This section adds the definitions of transmission, unbundled rates, and vertical market power.

SECTION 10. This section adds four subsections to the chapter, as follows.

Section 1A. This section details the Statement of Purpose for the bill. The legislature finds that customer choice of electricity supplier is in the public interest as it will result in long-term cost reductions.

Section 1B. This section provides for the essential underpinnings of a competitive electricity market structure and regulatory framework designed to reduce electricity costs to all consumers while maintaining safe and reliable electric service with minimum impact of the environment by establishing Principles for a Restructured Electric Industry.

Section 1C. This section, entitled Implementation, authorizes the department to promulgate final rules for the restructuring of the electric industry that are substantially consistent with the principles established in section 1B.

Section 1D. This section, entitled Regional Concerns, directs the department to work with the New England Power Pool, the Federal Energy Regulatory Commission, and state public utility commissions to adopt policy initiatives and statutory reforms to ensure the independent operation of the regional transmission system, in order to provide for full and fair competition in electric generation while preserving the reliability of the system.

SECTION 11. This section amends section 2 by exempting electric companies that engage in generation and which are not part of a vertically integrated electric company or do not have a distribution affiliate from sections three through thirty-three, inclusive (dealing with corporate rights and liabilities), and section ninety-three (dealing with the price or quality of gas or electricity) of G.L. c. 164.

SECTION 12. This section is inserted after section 47 and establishes a system of reciprocity whereby if a municipal light plant supplies generation service outside its own service territory, outside suppliers may provide generation service within the service territory of that municipal light plant.

SECTION 13. This section amends section 69I by authorizing the department to exempt any electric or gas company from any and all provisions of section 69I, including the requirements to file forecast and supply plans, after a determination by the department that an alternative process is in the public interest.

SECTION 14. This section replaces section 78 with language that includes suppliers in the notice of violation requirements.

SECTION 15. This section amends section 79 by including distribution-only companies and suppliers under this section which gives the supreme judicial court and the superior court jurisdiction in equity to enforce department orders.

SECTION 16. This section amends section 87 by including distribution-only companies in this section which requires the consent of a municipality to the entry of another electric company.

SECTION 17. This section amends section 92 by deleting all electric companies other than distribution-only electric companies from this section which establishes the right of customers to receive gas and electricity.

SECTION 18. This section amends section 92 by deleting all electric companies other than distribution-only electric companies from this section which establishes the right of customers to receive gas and electricity.

SECTIONS 19, 20, 21, and 22. These sections amend section 92A by deleting electric companies from this section which grants the right of a user in bulk (wholesale sales) to gas or electricity.

SECTION 23. This section amends section 94 by exempting suppliers from rate setting and contract approval requirements.

SECTION 24. This section amends section 94A by granting the department the authority to exempt any electric company from the requirement to seek department approval for purchases of gas or electricity over one year in duration.

SECTION 25. This section amends section 94G by granting the department the authority to exempt electric companies from the fuel charge and performance review requirements.

SECTION 26. This section amends section 94G1/2 by granting the department the authority to exempt any electric or gas company from the requirements of this section which deals with the conversion of electric generating facilities from oil to coal.

SECTION 27. This section amends section 95 by including distribution-only electric companies in the requirement to report accidents.

SECTION 28. This section amends section 125A by including suppliers in this section which allows gas or electric companies that have been supplying political subdivisions to continue to charge the contract rate for energy, after a contract lapses, until a new contract has been approved by the same political subdivision.

SECTION 29. This section amends section 128 by including distribution-only companies in this section which deals with payment of interest on a guaranty fund.

SECTION 30. This section repeals § 12M of chapter 25 which authorized an assessment each for the fuel charge bureau and for the integrated resource management section within the bureau of not more than \$1,750,000 because those assessments are now incorporated into a new general assessment against electric companies in section eighteen.

SECTION 31. This section repeals § 17 of chapter 25 which provided for an assessment not exceeding 1/4 of 1/10 of one percent of intrastate operating revenues of gas, electric and

telephone and telegraph companies sufficient to produce \$500,000 in revenues because that assessment is now incorporated in the new general assessment of 1/10 of one percent.

SECTION 32. This section repeals § 17A of chapter 25 which required the Department of Revenue to collect department assessments because § 18 now authorizes the department to collect all of our own assessments.

SECTION 33. This section amends chapter 25 by striking out § 18, which provided for an assessment not exceeding 1/10 of one percent of intrastate operating revenues of gas, electric and telephone and telegraph companies and inserting in its place a new section eighteen that consolidates the assessments from §§ 12M, 17, 17A and 18 as well as the residential conservation service assessment into a new general assessment against electric, gas and telephone and telegraph companies and a specific assessment on electric companies to replace the fuel charge bureau and integrated resource management section. In addition, this section retains the assessment for long-range forecasts issued against electric and gas companies.

SECTIONS 34, 35, and 36 delete the residential conservation assessment from chapter 233, § 89 of the Acts of 1983 because this assessment will now be incorporated into the new general assessment in § 18.

SECTION 37. This section authorizes the Department of Public Health, instead of the department of public utilities, to make a direct assessment of up to \$75,000 against each existing and proposed operator of a nuclear power plant to defray the costs incurred by the Department of Public Health for radiation monitoring.

SECTION 38. This section authorizes the Office of Emergency Preparedness, instead of the department of public utilities, to make a direct assessment against each existing and proposed operator of a nuclear power plant inside and outside of Massachusetts (within a ten mile radius of a Massachusetts town) to defray the emergency planning costs incurred by the Office of Emergency Preparedness in an amount to be determined annually by the General Court.

SECTION 39. This section states that if any provision of this act is held invalid, it does not affect other provisions.

SECTION 40. This section states that this act shall take effect upon its passage.

AN ACT RESTRUCTURING THE ELECTRIC UTILITY INDUSTRY
IN MASSACHUSETTS

WHEREAS, the deferred operation of this act would tend to defeat its purpose, which is to reduce the cost of electricity by granting customers the choice of electric supplier, therefore it is hereby declared to be an emergency law, necessary for the immediate preservation of the public convenience.

Be it enacted by the Senate and House of Representatives in the General Court and by the authority of the same, as follows:

SECTION 1. Section 1 of Chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting before the definition of "Alternative energy producer" the following definition:-

"Aggregator", an entity which groups electricity customers.

SECTION 2. Said section 1 of said chapter 164, as so appearing is hereby further amended by inserting after the definition of "Alternative energy producer" the following definition:-

"Ancillary services", those functions that support generation, transmission, and distribution and shall include the following services: (1) reactive power/voltage control; (2) loss compensation; (3) scheduling and dispatch; (4) load following; (5) system protection service; and (6) energy imbalance service.

SECTION 3. Said section 1 of said chapter 164, as so appearing is hereby further amended by inserting after the definition of "Department" the following definitions:-

"Distribution", the delivery of power over lines that operate at a voltage level typically equal to or greater than 110 volts and less than 69,000 volts to an end-use customer within Massachusetts. The distribution of electricity is subject to the jurisdiction of the department.

"Distribution service", the delivery of electricity to the customer by the electric distribution company from points on the transmission system or from a generating plant, at distribution voltage.

SECTION 4. Said section 1 of said chapter 164, as so appearing is hereby further amended, by inserting in the definition of "Electric company", in line 3, after the words "or distributing and selling," the following words:- or only distributing.

SECTION 5. Said section 1 of said chapter 164, as so appearing, is hereby further amended by inserting after the definition of "Electric company" the following definitions:-

"Electric service", the provision of generation, transmission, distribution, and/or ancillary services.

"Embedded costs", the cost of existing assets and obligations incurred by an electric company prior to August 16, 1995, pursuant to the provision of electric service, including (1) the amount of the net depreciated book costs directly related to existing generating facilities that are wholly or partly owned by the company, (2) the minimum financial obligation under existing long-term power purchase agreements, (3) the amount of the reported book balance associated with department-approved regulatory assets related to generation, and (4) the amount of costs that will be required to decommission nuclear generating facilities.

"Energy Efficiency", the application of the least amount of energy required to produce a desired output.

"FERC", the Federal Energy Regulatory Commission.

SECTION 6. Said section 1 of said chapter 164, as so appearing, is hereby further amended by inserting after the definition of "Gas company" the following definitions:-

"General Access Charge", the charge that provides the mechanism by which an electric company will collect the costs for public policy initiatives, including discounts for low-income customers, and for programs such as energy efficiency and renewables.

"Generation", the act or process of transforming other forms of energy into electric energy, or the amount of electric energy so produced.

"Generation service", the provision of generation and related services to a customer.

"Horizontal market power", where one or a few market participants combined have undue concentration in the ownership of facilities at the same level in the chain of production resulting in the ability to influence price to his or their own benefit.

"Mitigation", all actions or occurrences that reduce the amount of money that an electric company would need to collect through the stranded cost access charge in order to recover its embedded costs over time, including those resulting from both matters within the company's control (e.g., asset sales) and from matters not wholly within the company's control. Mitigation includes, but is not limited to: (1) sales of capacity, energy, and ancillary services from generating facilities that are wholly or partly owned by the company; (2) sales of capacity, energy, and ancillary services from generating facilities with which the company has a power purchase agreement; (3) adjustments to the company's minimum obligations under power purchase agreements that decrease such obligations, such as those that may be obtained through contract buy-out or renegotiation; (4) residual value; and (5) sales and voluntary writedowns of company assets.

SECTION 7. Said section 1 of said chapter 164, as so appearing, is hereby further amended by inserting after the definition of "Primary energy source" the following definitions:-

"Renewables", those renewable energy sources or emerging technologies that are relatively immature but have significant potential for commercialization in New England, and shall include solar and wind power projects, fuel cells and biomass (limited to dedicated fuel stock cultivation, except wood).

"Residual value" shall mean the value of electric company assets, not including the income that may be obtained through generating facility operation.

SECTION 8. Said section 1 of said chapter 164, as so appearing, is hereby further amended by inserting after the definition of "Small power production facility" the following definitions:-

"Stranded costs", the embedded costs that remain after accounting for maximum possible mitigation of such costs.

"Stranded cost access charge", the charge that provides the mechanism for recovery of an electric company's stranded costs.

"Supplier", shall mean any supplier of generation service to retail customers, including load aggregators, power marketers, brokers, and marketing affiliates of electric companies, except that no electric company shall be considered a supplier.

SECTION 9. Said section 1 of said chapter 164, as so appearing, is hereby further amended by inserting after the definition of "Supplying electricity in bulk" the following definitions:-

"Transmission", the delivery of power over lines that operate at a voltage level typically equal to or greater than 69,000 volts from generating units across interconnected high voltage lines to where it enters a distribution system. The transmission of electricity is subject to the jurisdiction of the FERC.

"Unbundled rates", rates designed to separate the costs of providing generation, transmission, and distribution services, and stranded and general access charges.

"Vertical market power", where one or a few market participants, having joint ownership of facilities at differing levels of the chain of production, such as generation, transmission, and distribution, have the ability to use such joint ownership to influence price to his or their own benefit.

SECTION 10. Chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby further amended by inserting after Section 1 the following four sections:-

Section 1A. Statement of Purpose

The Legislature finds and declares that a restructuring of the electric utility industry in the Commonwealth of Massachusetts to create the opportunity for retail customer choice in electricity supply is in the public interest. The intent of this legislation is to reduce costs to all consumers of electricity by implementing an efficient electric utility industry structure that offers choice of generation suppliers to consumers while maintaining the safety and reliability of electric services with minimum impact on the environment.

Long-term cost reductions can be achieved most effectively by increasing competition and enabling broad customer choice in generation service, thereby allowing market forces to play the principal role in determining the suppliers of generation for all customers. The primary elements of a more competitive electricity market therefore will be customer choice and full and fair competition in generation. A competitive industry structure can and must also ensure safety and reliability and further environmental protection goals effectively. Transmission and distribution of electricity will currently remain monopoly services.

Competitive markets in generation should (1) provide electricity suppliers with the incentive to operate efficiently, (2) open markets for new and improved technologies, (3) provide electricity buyers and sellers with appropriate price signals, and (4) improve public confidence in the electric utility industry.

The interests of consumers can best be served by an expedient and orderly transition from regulation to competition in the generation sector, in order to bring to consumers the benefits of competition as quickly as possible. Key elements of this transition are the unbundling of prices and services and at least the functional separation of generation services from transmission and distribution services.

It is the intent of the Legislature to ensure that Massachusetts' transition to a more competitive electricity market structure (1) allows its citizens and businesses to achieve the economic benefits of industry restructuring by January one, nineteen hundred and ninety-eight, (2) creates a new market structure that provides competitive, low-cost and reliable electric service, (3) provides assurances that consumers of electricity in the new market will have sufficient information and protection, and (4) preserves Massachusetts' commitment to the environment.

It is the intent of the Legislature to establish the legislative foundation for transforming the regulatory framework of the Massachusetts electric utility industry consistent with the restructuring principles stated in SECTION 10 (Section one B). These principles are intended to guide the department of public utilities in implementing a statewide plan and rules for restructuring the electric industry, in establishing stranded cost charges, in reviewing and approving each utility's filing in compliance with rules promulgated by the department, and in regulating certain aspects of the restructured electric industry. In addition, these principles are intended to guide the Massachusetts courts, the department of environmental protection and

other agencies of the Commonwealth in promoting and regulating the restructured electric industry.

Section 1B. Principles for a Restructured Electric Industry

The department shall establish the essential underpinnings of a competitive electricity market structure and regulatory framework designed to reduce electricity costs to all consumers while maintaining safe and reliable electric service with minimum impact on the environment, consistent with the following principles.

1. Provide the broadest possible customer choice. Customer choice is the guarantor of efficient and fully competitive markets. Ultimately, customers served by the electric industry should be able to choose among a range of service providers, services, pricing options, and payment terms. As a corollary to their increased freedom of choice, customers should expect to be responsible for the consequences of their decisions.
2. Provide all customers with an opportunity to share in the benefits of increased competition. The new electricity market structure must provide all customers with an early opportunity to share in the benefits of increased competition. One customer class may not reap benefits at the expense of another.
3. Ensure full and fair competition in generation markets. Choice for retail customers cannot exist without a range of viable suppliers. The rules that govern market activity must apply to all buyers and sellers in a fair and consistent manner in order to ensure a fully competitive market.
4. Functionally separate generation, transmission, and distribution services. Generation, transmission and distribution services within the electric utility industry must be functionally separated in order to move to a fully competitive generation market based on customer choice. Vertical integration should not be allowed to interfere with the operation of efficient markets for electricity. The functional separation of generation from transmission and distribution services is a necessary first step to address market power issues and limit a company's ability to provide itself an undue advantage in buying or selling services in competitive markets.
5. Provide universal service. Electric service is essential and should be available and affordable to all customers. The new competitive electricity market structure and regulatory framework must provide a level of protection for low-income customers equivalent to that provided within the current electric utility industry structure. Each electric company that provides distribution service shall have an obligation to procure electric service for customers in its service territory, as necessary.
6. Support and further the goals of environmental regulation. A competitive electricity market structure should support and further the efforts of environmental regulators to reduce the environmental impacts of electricity generation. Increased competition in the electric

utility industry offers a new opportunity to harness market forces in pursuit of environmental improvement. Increased competition should create incentives for suppliers to anticipate and minimize the costs of complying with current and future environmental regulations at both existing and new plants. Consistent with the department's principle of ensuring full and fair competition in generation markets, all like generating facilities should, over time, be subject to equivalent levels of environmental regulation, insofar as this is compatible with cost reduction and does not disadvantage Massachusetts relative to other states.

7. Rely on incentive regulation where a fully competitive market does not exist. Market forces should be allowed to replace regulation where and when fully competitive markets exist. Incentive regulation should govern any segment of the industry where a fully competitive market does not exist. For example, incentive regulation should govern monopoly segments of the industry, such as distribution services.

8. Honor existing commitments. Electric companies should have a reasonable opportunity to recover net, non-mitigable, stranded costs associated with commitments previously incurred pursuant to their legal obligations to provide electric service. Electric companies must take all practicable measures to mitigate stranded costs during the transition to a competitive market. The amount of stranded costs should be determined on a net basis that reflects all resources in an electric company's portfolio (*i.e.*, including those that positively and negatively vary from the market price for electricity). Any stranded cost recovery mechanisms should provide for a non-discriminatory charge that cannot be bypassed.

9. Unbundle rates. Rates for generation, transmission, distribution, and ancillary services should be unbundled as soon as possible. This unbundling of rates is critical to provide both customers and competitors with the information they need to make decisions in a more competitive environment. The department retains the authority to require that electric companies recombine these functions on customer bills.

10. Seek near-term rate relief. In the near term, electric companies should seek to establish rate levels for all customers meaningfully lower than they would have been under cost-of-service rate regulation.

11. Maintain Demand-Side Management ("DSM") programs. Electric company-sponsored DSM programs have fostered a valuable infrastructure of expertise, capital, and labor in Massachusetts and can provide a cost-effective alternative to new generating plant. There must be provision during the transition to a competitive generation market to preserve this infrastructure so that DSM has a meaningful opportunity to compete in a restructured industry. DSM may also have a continuing role in the long term in addressing ongoing market failures.

12. Support alternative energy resources. In order to promote more options for customers, lower customers' electric bills, reduce the environmental impact of providing electric service, and further state and national energy goals, electric companies should support the development and use of renewable energy sources, and encourage distributed generation facilities,

so that these alternative energy resources have an opportunity to compete in a restructured industry.

13. Ensure that the transition to a competitive market is orderly and expeditious, and minimizes customer confusion. An orderly, expeditious transition process that minimizes customer confusion is critical to reaping the greatest possible benefit from the move to a competitive industry structure. A negotiation process that involves all affected parties, including representatives of residential, commercial and industrial customers, utilities, independent power producers, power marketers, public interest and environmental organizations, and government agencies, is desirable to ensure such an orderly transition. The transition process should provide for public involvement and education and should be guided by the principles outlined in this section.

Section 1C. Implementation

The department shall promulgate final rules for the restructuring of the electric utility industry that are substantially consistent with the principles in SECTION 10 (Section one B). The department shall implement regulations that will require electric companies to provide to all customers retail choice of electric generation suppliers. The department shall require that retail choice be provided by January one, nineteen hundred and ninety-eight, or at the earliest date determined to be in the public interest by the department.

The department is specifically authorized to promulgate rules including but not limited to the following:

1. Establish a non-bypassable stranded cost access charge for each existing electric company, provided that such charge is equitable and is substantially consistent with the principles in section nine B. Each existing electric company shall have the burden of establishing the existence and the amount of any stranded costs.
2. Require the existing electric companies to separate their generation, transmission, and distribution functions and require that each electric company that retains generating assets and plans to sell generation in the competitive marketplace must establish a separate corporate marketing affiliate.
3. Establish rules to promote effective competition and guard against the exercise of vertical market power and the accumulation of horizontal market power; to institute a complaint mechanism for resolution of disputes arising from alleged vertical or horizontal market power abuses; to hear such disputes in the first instance and to refer them to the Attorney General for appropriate resolution; and to impose fines or penalties for violations of the corporate rules of conduct, 220 C.M.R. 12.00 et seq.
4. Establish non-price regulations over the activities of suppliers.

5. Establish a non-bypassable general access charge, the revenues of which shall be used to provide discounted rates to low-income customers and to promote programs authorized by the department such as renewable energy resources and energy efficiency programs.
6. Establish performance-based ratemaking for distribution regulation.

The department shall remove all obstacles, within its jurisdiction, to the implementation of full retail choice within Massachusetts by January one, nineteen hundred and ninety-eight, or such other date that it determines is appropriate.

Any administrative or adjudicative proceeding or public hearing related to the implementation of this act shall be subject to the provisions of chapters one hundred and sixty-four, thirty A, and twenty-five of the General Laws.

Nothing in this act shall be construed to prohibit the department from otherwise exercising its lawful authority under chapter one-hundred and sixty-four of the General Laws, in proceedings that relate to the introduction of competition in the generation sector.

Section 1D. Regional Concerns

Consistent with the principles in SECTION 10 (Section one B), the department is directed to work with the operator of the bulk power system in New England (currently the New England Power Pool ("NEPOOL")), FERC, and other state public utility commissions to adopt and implement appropriate policy initiatives and statutory reforms, including the reform or replacement of NEPOOL to ensure the independent operation of the regional transmission system, in order to provide for full and fair competition in electric generation while preserving the reliability of the system.

SECTION 11. Section 2 of said chapter 164, of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting in line 21, after the words "municipal lighting plants." the following sentence:- Electric companies that engage in generation and which are not part of a vertically integrated electric company or do not have a distribution affiliate, shall be exempt from sections three through thirty-three, inclusive, and section ninety-three of said chapter one hundred and sixty-four.

SECTION 12. Said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, after section 47, the following section:-

Section 47A. A municipal light plant may prohibit retail sales by suppliers within its service territory; provided, however, that a municipal light plant may supply generation service outside its own service territory only if outside suppliers may provide generation service within the service territory of that municipal light plant.

SECTION 13. Section 69I of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting after line 90 the following sentence:-

The department is authorized to exempt any electric or gas company from any or all provisions of this section upon a determination by the department, after notice and hearing, that an alternative process is in the public interest.

SECTION 14. Said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by striking section 78 and inserting in place thereof the following section:-

Section 78. If any electric or gas company or supplier violates or fails to comply with the provisions of law, or violates or fails to comply with any lawful order of the department, the department shall give written notice thereof to such electric or gas company or supplier and to the attorney general.

SECTION 15. Section 79 of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by striking out, in lines 3-4, the words "or corporations engaged in the manufacture and sale or distribution and sale of gas or electricity" and inserting the following words:- ,electric or gas companies, or suppliers.

SECTION 16. Section 87 of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, in line 2, after the words "or sale", the following words:- or distribution.

SECTION 17. Section 92 of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, in line 3, after the words "manufacture, transmission or sale of gas or", the following words:- the distribution of.

SECTION 18. Said section 92 of said chapter 164 of the General Laws, as so appearing, is hereby further amended by striking, in line 10, the words "of electricity".

SECTION 19. Section 92A of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by striking, in line 2, after the words "supply gas", the words:- or electricity.

SECTION 20. Said Section 92A of said chapter 164, as so appearing, is hereby further amended by striking, in line 5, after the words "of gas", the words:- or electricity.

SECTION 21. Said Section 92A of said chapter 164, as so appearing, is hereby further amended by striking, in line 9, after the words "with gas", the words:- or electricity.

SECTION 22. Said Section 92A of said chapter 164, as so appearing, is hereby further amended by striking, in line 15, after the words "of gas", the words:- or electricity.

SECTION 23. Section 94 of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, in line 61, after the words "except as therein provided.", the following sentence:- Suppliers shall be exempt from the provisions of this chapter.

SECTION 24. Section 94A of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, in line 47, after the words "shall be null and void.", the following sentence:- The department is authorized to exempt any electric company from any or all provisions of this section upon a determination by the department, after notice and hearing, that an alternative process or incentive mechanism is in the public interest.

SECTION 25. Section 94G of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, after subsection (f), the following new subsection:-

(g) The department is authorized to exempt any electric company from any or all provisions of this section upon a determination by the department, after notice and hearing, that an alternative process or incentive mechanism is in the public interest.

SECTION 26. Section 94G1/2 of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, after line 177, the following sentence:-

The department is authorized to exempt any electric or gas company from any or all provisions of this section upon a determination by the department, after notice and hearing, that an alternative process is in the public interest.

SECTION 27. Section 95 of said chapter 164 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by inserting, in line 2, after the word "manufacture", the following word:- ,distribution,.

SECTION 28. Section 125A of said chapter 164 of the General Laws, as so appearing, is hereby amended by inserting, in line 1, after the words "gas or electric company", the following words:- or supplier.

SECTION 29. Section 128 of said chapter 164 of the General Laws, as so appearing, is hereby amended by inserting, in line 2, after the words "supply and distribution", the following words:- or only distribution.

SECTION 30. Section 12M of chapter 25 of the General Laws, as appearing in the 1994 Official Edition, is hereby repealed.

SECTION 31. Section 17 of said chapter 25 of the General Laws, as appearing in the 1994 Official Edition, is hereby repealed.

SECTION 32. Section 17A of said chapter 25 of the General Laws, as appearing in the 1994 Official Edition, is hereby repealed.

SECTION 33. Chapter 25 of the General Laws, as appearing in the 1994 Official Edition, is hereby amended by striking out section 18 and inserting in place thereof the following section:-

Section 18. The commission is hereby authorized to make an assessment against each electric, gas, telephone and telegraph company under the jurisdictional control of the department, based upon the intrastate operating revenues subject to the jurisdiction of the department of each of said companies derived from sales within the commonwealth of electric, gas, telephone and telegraph service respectively, as shown in the annual report of each of said companies to the department.

Said assessments shall be made at a rate not exceeding one-tenth of one percent of such intrastate operating revenues, as shall be determined and certified annually by the commission as sufficient to reimburse the commonwealth for funds appropriated by the General Court for the operation and general administration of the department and for fringe benefits costs, including group life and health insurance, retirement benefits, paid vacations and holidays and sick leave, not to exceed twenty-two percent of the amount attributable to personnel costs of employees of the department in the fiscal year in which the assessment is made, exclusive of funds appropriated by the general court for the transportation division. The funds may be used to compensate consultants in hearings on petitions filed by companies subject to assessment under this section. Any funds unexpended in any fiscal year for the purposes for which such assessments were made shall be credited against the assessment to be made in the following fiscal year and the assessment in the following fiscal year shall be reduced by any such unexpended amount. Assessments made under this section may be credited to the normal operating cost of each company. Such estimated assessments shall be collected by the department. Each company shall pay the amount assessed against it within thirty days after the date of the notice of estimated assessment from the department. The amount so collected shall be credited to the General Fund. The department subsequently shall make assessment adjustments for any variation between the estimated and actual amounts of such assessments. Such estimated and actual costs shall include an amount equal to the cost of fringe benefits as established by the commissioner of administration pursuant to section six B of chapter twenty-nine.

For the purpose of providing the department with additional operating funds for the regulation of electric companies, the commission is authorized to make a separate assessment proportionally against each electric company under the jurisdictional control of the department based upon the intrastate operating revenues subject to the jurisdiction of the department of each of said companies derived from wholesale and retail sales of electricity within the commonwealth as shown in the annual report of said companies to the department. Said additional assessment shall be made at a rate as shall be determined and certified annually by the commission as sufficient to produce not more than one million, seven hundred and fifty thousand dollars in revenue for the fiscal year in which the assessment is made and shall be collected by the department. The commission is also authorized to expend for the operation of the department such amounts which are appropriated for that purpose.

A schedule of filing fees shall be determined annually by the commissioner of administration under the provisions of section three B of chapter seven for the following:

(a) petitions for certificates of environmental impact and public need; provided, however, that such filing fee for any municipal corporation empowered to operate a municipal lighting plant

under the provisions of section thirty-five or thirty-six of chapter one hundred and sixty-four shall not exceed a maximum amount; (b) long-range forecasts - a total maximum amount annually from the electric companies with the fee for each applicant being determined by its proportion of the total kilowatt hour sales to ultimate customers in the commonwealth for the prior year, and a total maximum amount annually from the gas companies with the fee for each applicant being determined by its pro rata percentage of the firm gas revenues from sales to customers in the commonwealth for the prior year; and (c) notices of intention to construct an oil facility - a maximum amount per oil facility to be graduated in accordance with the expected capital investment in the facility. With respect to the fees for long-range forecasts, as provided in clause (b), the department shall apportion such fees on an estimated basis for the pending fiscal year among electric and gas companies, as defined in section sixty-nine G of chapter one hundred and sixty-four, and shall assess them on a fair and reasonable basis. In addition to said assessment amount, the assessment shall include amounts, credited to the General Fund, for fringe benefits costs, including group life and health insurance, retirement benefits, paid vacations and holidays and sick leave, not to exceed twenty-two percent of the amount attributable to personnel costs of said department subject to assessment under the provisions of this section. Such companies shall pay such assessments to the commonwealth within thirty days of receipt of notice thereof. The commission shall subsequently apportion actual fees among all such companies and shall make assessment adjustments for the same for any variation between estimated and actual fees on a fair and reasonable basis. Notwithstanding the provisions of section twenty of chapter one hundred and fifty-nine and section ninety-four of chapter one hundred and sixty-four, during any fiscal year in which such assessment is made, the department shall have no authority to suspend the effective date of any rate, price or charge set forth in any schedule filed subsequent to January first, nineteen hundred and seventy-seven, by a telephone or telegraph company under the provisions of chapter one hundred and fifty-nine or by any gas or electric company under the provisions of section ninety-four of chapter one hundred and sixty-four for a period longer than six months; provided, however, that in the event that such six month period expires on a Sunday or legal holiday, any rate price or charge suspended under this section shall remain suspended until the day following the next day which is not a Sunday or legal holiday.

SECTION 34. The first sentence in section eighty-nine of chapter two hundred and thirty-three of the Acts of nineteen hundred and eighty-three is hereby amended by striking out the words "and the department are hereby each severally" and inserting in place thereof the following word:- is.

SECTION 35. The third sentence in section eighty-nine of chapter two hundred and thirty-three of the Acts of nineteen hundred and eighty-three is hereby amended by striking out the words:- or department.

SECTION 36. The sixth sentence in section eighty-nine of chapter two hundred and thirty-three of the Acts of nineteen hundred and eighty-three is hereby amended by striking out the words:- or department.

SECTION 37. The Department of Public Health is hereby authorized to make an assessment against each existing and proposed operator of a nuclear power plant to defray the costs incurred by the department in the performance of its duties under section five K of chapter one hundred and eleven, in an amount not to exceed seventy-five thousand dollars per facility.

SECTION 38. The office of emergency preparedness is hereby authorized to make an assessment against each existing and proposed operator of a nuclear power plant inside and outside of Massachusetts (within a ten mile radius of a Massachusetts town) to defray the costs incurred by the office of emergency preparedness in the performance of its duties pertaining to nuclear safety emergency preparedness in an amount to be determined annually by the General Court.

SECTION 39. If any provision of this act or the application thereof to any person or circumstances is held invalid, the invalidity does not affect other provisions or applications of the act that can be given effect without the invalid provisions or applications, and to this end the provisions of this act are severable.

SECTION 40. This act shall take effect upon its passage.

APPENDIX C
D.P.U. 95-30 EXECUTIVE SUMMARY/PRINCIPLES

[The following is an excerpt from D.P.U. 95-30 (1995)]

On February 10, 1995, the Department of Public Utilities ("Department") issued a Notice of Inquiry and Order Seeking Comments on Electric Industry Restructuring ("NOI") in D.P.U. 95-30, in order to investigate a restructuring of the electric utility industry in Massachusetts. The move from a regulated industry to a competitive industry usually leads to greater efficiencies and lower prices, with more and better choices for consumers. Where government regulation is relied on to promote these ends, regulation can at best attempt to approximate the results of fully competitive markets. Where changes in an industry can be introduced that permit greater reliance on competitive market forces, the need for government regulation must be reassessed. The electric industry has entered just such an era of change. Accordingly, the Department opened this inquiry to investigate and determine (1) how a restructuring of the electric industry in Massachusetts would promote competition and economic efficiency and expand opportunities that would benefit consumers, (2) whether and how to extend to some or all customers the option of choosing their own electricity suppliers, (3) how such a restructuring could be implemented, and (4) the appropriate regulatory mechanisms to apply to a restructured electric industry. D.P.U. 95-30, NOI at 1-2.

DEPARTMENT GOAL FOR THE FUTURE ELECTRIC INDUSTRY

Reducing costs, over time, for all consumers of electricity is the primary objective of the Department's efforts in restructuring the electric industry. The Department's overall goal in this proceeding is the development of an efficient industry structure and regulatory framework that

minimize long-term costs to consumers while maintaining the safety and reliability of electric services with minimum impact on the environment.

Long-term cost reductions will be achieved most effectively by increasing competition in the generation industry and enabling broad customer choice, thereby allowing market forces to play the principal role in organizing electricity supply for all customers. The primary elements of a fully competitive electricity market therefore will be customer choice and full and fair competition in generation. A competitive industry structure can also ensure safety and reliability and further environmental protection goals effectively.

The Department finds that the interests of ratepayers would best be served by an expedient and orderly transition from regulation to competition in the generation sector, in order to bring to ratepayers the benefits of competition as quickly as possible. Among the key issues in the transition to a competitive electricity market are the treatment of stranded costs and the unbundling of rates.

Although the record in this proceeding does not establish that there exists any clear legal entitlement to recovery of stranded costs, litigation over recovery of stranded costs would delay competition and the benefits it would bring. Therefore, responsible policy must provide electric utilities a reasonable opportunity to recover net, non-mitigatable stranded costs during the transition period. The Department finds that it has authority under G.L. c. 164, §§ 76 and 94 to implement this policy regarding stranded costs, and that such a policy is in the public interest.

The unbundling of rates is necessary to provide consumers with accurate price signals and the ability to purchase competitive generation supplies separately from transmission and distribution services. The Department finds that it has authority under G.L. c. 164, §§ 76 and 94

to order the unbundling of electric rates, thus enabling the purchase and sale of electricity-related services in a transparent and comparable manner.

Transmission and distribution of electricity will likely remain monopoly services for the near future and thus will require continued regulatory oversight. Incentive regulation should govern these monopoly segments of the industry. During the transition to a fully competitive market, incentive regulation of the generation sector can also encourage suppliers to improve the efficiency of electricity production.

The Department will work closely with the Legislature and other appropriate government agencies to accomplish its overall goal of developing an efficient industry structure and regulatory framework that minimize long-term costs to consumers while maintaining the safety and reliability of electric service, with a minimum impact on the environment. A successful restructuring of the electric industry will be advanced by the coordination of state, regional and federal efforts in this direction.

PRINCIPLES FOR A RESTRUCTURED ELECTRIC INDUSTRY

In this Order, the Department develops principles that describe the key characteristics of a restructured electric industry as we envision it. These principles outline the key elements of the future industry structure, identify public policy goals that must continue to be served and indicate the nature of future regulation. These principles are set forth below and discussed in greater detail in Section III (D.P.U. 95-30).

1. Provide the broadest possible customer choice.
2. Provide all customers with an opportunity to share in the benefits of increased competition.

3. Ensure full and fair competition in generation markets.
4. Functionally separate generation, transmission, and distribution services.
5. Provide universal service.
6. Support and further the goals of environmental regulation.
7. Rely on incentive regulation where a fully competitive market cannot exist, or does not yet exist.

PRINCIPLES FOR THE TRANSITION TO A RESTRUCTURED ELECTRIC INDUSTRY

The Department also sets out principles for guiding the transition from a regulated to a competitive industry structure. These principles identify fundamental conditions for facilitating the transition process and ensuring that the end result benefits customers. Section IV of the [D.P.U. 95-30] Order discusses these principles in greater detail.

1. Honor existing commitments.
2. Unbundle rates.
3. Seek near-term rate relief.
4. Maintain demand-side management programs.
5. Ensure that the transition is orderly and expeditious, and minimizes customer confusion.

I. PRINCIPLES FOR A RESTRUCTURED ELECTRIC INDUSTRY

A. Principles

The following principles establish the essential underpinnings of an electric industry structure and regulatory framework designed to minimize long-term costs to customers while maintaining safe and reliable electric service with minimum impact on the environment.

1. Provide the broadest possible customer choice.

Customer choice is the guarantor of efficient and fully competitive markets.²⁰⁵ Ultimately, customers served by the electric industry should be able to choose among a range of service providers, services, pricing options, and payment terms. As a corollary to their increased freedom of choice, customers should expect to be responsible for the consequences of their decisions.

2. Provide all customers with an opportunity to share in the benefits of increased competition.

The new industry structure must provide all customers with an early opportunity to share in the benefits of increased competition. One customer class may not reap benefits at the expense of another.

3. Ensure full and fair competition in generation markets.

Choice for retail customers cannot exist without a range of viable suppliers. The rules that govern market activity must apply to all buyers and sellers in a fair and consistent manner in order to ensure a fully competitive market.

²⁰⁵

The Department recognizes that under real-world conditions perfect competition cannot be achieved, since markets suffer such unavoidable constraints as imperfect information. Nevertheless, in striving for a fully competitive market, the Department seeks to ensure that certain impediments to competition, such as barriers to entry and use of monopoly power, are removed to the extent possible.

4. Functionally separate generation, transmission, and distribution services.

Generation, transmission and distribution services within the industry must be functionally separated in order to move to a fully competitive generation market based on customer choice. Vertical integration should not be allowed to interfere with the operation of efficient markets for electricity. However, mandatory divestiture is not desirable or necessary at this time. The functional separation of generation from transmission and distribution services is a necessary first step to address market power issues and limit a company's ability to provide itself an undue advantage in buying or selling services in competitive markets.

5. Provide universal service.

Electric service is essential and should be available and affordable to all customers. The new industry structure must provide a level of protection for low-income customers equivalent to that provided within the current industry structure. Each distribution utility must continue to have an obligation to connect all customers in its service territory to the distribution system.

6. Support and further the goals of environmental regulation.

A competitive industry structure should support and further the efforts of environmental regulators to reduce the environmental impacts of electricity generation. The Department believes that increased competition in the electric industry offers a new opportunity to harness market forces in pursuit of environmental improvement. Increased competition should create incentives for suppliers to anticipate and minimize the costs of complying with current and future environmental regulations at both existing and new plants. Consistent with the Department's principle of ensuring full and fair competition in generation markets, all like generating facilities should over time be subject to equivalent levels of environmental regulation, insofar as this is

compatible with our cost reduction objective and does not disadvantage Massachusetts relative to other states.

7. Rely on incentive regulation where a fully competitive market cannot exist, or does not yet exist.

Market forces should be allowed to replace regulation where and when fully competitive markets exist. Incentive regulation should govern any segment of the industry where a fully competitive market cannot exist, or does not yet exist. Specifically, incentive regulation should govern monopoly segments of the industry, such as distribution and transmission services; incentive regulation should also be applied to those generation providers that retain market power prior to the emergence of a fully competitive market.

II. TRANSITION FROM A REGULATED TO A COMPETITIVE INDUSTRY STRUCTURE

A. Transition Principles

In this section, the Department presents principles to guide the transition.

1. Honor existing commitments.

Utilities should have a reasonable opportunity to recover net, non-mitigatable, stranded costs associated with commitments previously incurred pursuant to their legal obligations to provide electric service. Utilities must take all practicable measures to mitigate stranded costs during the transition. The amount of stranded costs should be determined on a net basis that reflects all resources in a utility's portfolio (i.e., including those that positively or negatively vary from the market price for electricity). Any stranded cost recovery mechanisms should provide for a non-discriminatory charge that cannot be bypassed. Stranded costs should be recovered for a period of time no longer than ten years.

2. Unbundle rates.

Rates for generation, transmission, distribution, and ancillary services should be unbundled as soon as possible. This unbundling of rates is critical to provide both customers and competitors with the information they need to make decisions in a more competitive environment.

3. Seek near-term rate relief.

In the near term, utilities should work to produce rates for all customers meaningfully lower than they would have been under the current system of rate regulation.

4. Maintain DSM programs.

Utility-implemented DSM programs have built a valuable infrastructure of expertise, capital, and labor in Massachusetts. There must be provision during the transition period to preserve this infrastructure so that DSM has a meaningful opportunity to compete in a restructured industry.

5. Ensure that the transition is orderly and expeditious, and minimizes customer confusion.

An orderly, expeditious transition process that minimizes customer confusion is critical to reaping the benefits from the move to a competitive industry structure. A negotiation process that involves all affected parties, including representatives of residential, commercial and industrial customers, utilities, independent power producers, power marketers, public interest and environmental organizations, and government agencies, is key to ensuring such an orderly transition. The transition process should provide for public involvement and education and should be guided by the Department's principles outlined herein.

APPENDIX D
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APPENDIX E
D.P.U. 96-100 LIST OF COMMENTERS

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Alternate Power Source, Inc.
American National Power
Anglo Fabrics Company, Inc.
Associated Industries of Massachusetts
Association of Independent Colleges and Universities in Massachusetts
Attorney General
Boston Edison Company
Boston Oil Consumer Alliance
Brandeis University
Brodie Mountain Ski Resort
Building Owners and Managers Association
Center for Energy and Economic Development
Citizen Action of Massachusetts
Citizens Lehman Power L.P.
Clean Water Action
Colonial Bed & Breakfast
Competitive Power Coalition of New England
Conservation Law Foundation
Consumers for Affordable Clean Electricity
Crystal Systems
David Clark Company, Inc.
DuPont Merck
Eastern Edison Company
Enron Capital & Trade Resources
Fitchburg Gas and Electric Light Company
Freedom Energy Company, L.L.C.
General Electric Company
Guaranty Management Company, Inc.
Havern, Senator Robert
Hawkes, Theodore
Hedlund, Senator Robert
Heyes Forest Products
INCOM
Intercontinental Energy Corp.
Kelly Molded Products
Kopin Corporation
Lynn Area Chamber of Commerce
Malden Redevelopment Authority

Massachusetts Department of Environmental Protection
Massachusetts Division of Energy Resources
Massachusetts Electric Company
Massachusetts Energy Efficiency Council
Massachusetts Municipal Light Plants
Massachusetts Municipal Wholesale Electric Company
Massachusetts Public Interest Research Group
Melconian, Senator Linda J.
Merrimack Valley Chamber of Commerce
Murray, Senator Therese
Myers, Laura H.
Myles Standish Industrial Park
New England Plating Company, Inc.
Norton, Senate Majority Leader Thomas C.
Park Ave. Market
Pequod Associates, Inc.
Prolerized New England Company
Quincy Youth Arena, Inc.
Renewable Energy Technology Analysis
Retailers Association of Massachusetts
South Essex Sewerage District
Summit Plastic Solution, Inc.
Swift, Senator Jane
The Energy Consortium
The Flatley Company
The Low-Income Consumers by the National Consumer Law Center, Inc.
Town of Lexington
Town of Erving, Board of Selectmen
Tufts University
Union of Concerned Scientists
Varian Ion Implant Systems
Western Massachusetts Electric Company
Wheeled Electric Power Company
WMECo Industrial Customer Group

List of May 24, 1996 Commenters

Advanced Cast Products, Inc.
Affiliated Municipalities
Alternate Power Source, Inc.
American National Power
Anglo Fabrics Company, Inc.
Associated Industries of Massachusetts
Association of Independent Colleges and Universities in Massachusetts
Attorney General
Barnstable County Commissioners
Boston Edison Company
Brandeis University
Brodie Mountain Ski Resort
Browning-Ferris Industries, New England Division, Northern Region
Building Owners and Managers Association
Business for Social Responsibility Education Fund
Cape & Islands Self-Reliance Corp.
Center for Energy and Economic Development
Citizens Fund
Citizens Lehman Power L.P.
City of Boston
Commonwealth Electric Company and Cambridge Electric Light Company
Competitive Power Coalition of New England
Conservation Law Foundation
Consumers for Affordable Clean Electricity
Crystal Systems
David Clark Company, Inc.
DuPont Merck
Eastern Utilities Associates
Eastern Edison Company
Enron Capital & Trade Resources
Environmental Futures, Inc.
Evergreen Solar, Inc.
Fisher, Sheehan and Colton Public Finance and General Economics
Fitchburg Gas and Electric Light Company
Freedom Energy Company, L.L.C.
Gekas, Katherine S.
Guaranty Management Company, Inc.
Heyes Forest Products
INCOM
Integrated Waste Services Association
Intelligen Energy Systems, Inc.

Intercontinental Energy Corporation
IRATE, Inc.
Kelly Molded Products
Kopin Corporation
Lynn Area Chamber of Commerce
Malden Redevelopment Authority
Massachusetts Alliance of Utility Unions
Massachusetts Department of Environmental Protection
Massachusetts Division of Energy Resources
Massachusetts Electric Company
Massachusetts Energy Efficiency Council
Massachusetts Municipal Association
Massachusetts Municipal Light Plants
Massachusetts Municipal Wholesale Electric Company
Massachusetts Oilheat Council, Inc.
Massachusetts Public Interest Research Group
Merrimack Valley Chamber of Commerce
Myers, Laura H.
National Consumer Law Center
National Independent Energy Producers
New England Plating Co., Inc.
Northeast Sustainable Energy Association
Norton, Senate Majority Leader Thomas C.
Pan Energy
Park Ave. Market
Prolerized New England Co.
Quincy Youth Arena, Inc.
Renewable Energy Technology Analysis
Retailers Association of Massachusetts
Save Our Region's Economy
Schwartz, David A.
Second Wind, Inc.
Solar Design Associates
South Essex Sewerage District
Swampscott Public Schools
The Flatley Company
The Low-Income Consumers by the National Consumer Law Center, Inc.
The Energy Consortium
Town of Lexington
Town of Plymouth
Tufts University
Union of Concerned Scientists
United States Environmental Protection Agency

Urban Solar Initiative

Varian Ion Implant Systems

Western Massachusetts Electric Company

Wheeled Electric Power Company

WMECo Industrial Customer Group

List of August 2, 1996 Commenters

Alternate Power Source, Inc.
American National Power
Boston Edison Company
Cape & Islands Self-Reliance Corp.
CellNet Data Systems
City of Everett
Commonwealth Electric Company and Cambridge Electric Light Company
Competitive Power Coalition of New England, Inc.
Cree Regional Authority
Data Translation, Inc.
Eastern Edison Company
Enron Capital & Trade Resources
Environmental Futures
Evergreen Solar, Inc.
Fisher, Sheehan and Colton Public Finance and General Economics
Fitchburg Gas & Electric Light Company
Galluccio, Anthony
Gorman, Philip M. Jr.
Harvard Medical School
Intelligen Energy Systems, Inc.
Intercontinental Energy Corp.
IRATE, Inc.
Malden Redevelopment Authority
Massachusetts Department of Environmental Protection
Massachusetts Electric Company
Massachusetts Energy Efficiency Council
Massachusetts Municipal Light Plants
Massachusetts Municipal Wholesale Electric Company
Massachusetts Public Interest Research Group
National Consumer Law Center
Northeast Energy & Commerce Association
Norton Diamond Film
Retailers Association of Massachusetts
Schwartz, David A.
South Shore Community Action Council, Inc.
South Essex Sewerage District
The Energy Consortium
The Flatley Company
Town of Montague, Board of Selectmen
Town of Erving
Town of Lexington

Union of Concerned Scientists
Western Massachusetts Industrial Customer Group
Western Massachusetts Electric Company
Wheeled Electric Power Company
Zwirblia, Joseph E.

MISCELLANEOUS

Alexander, Robert W. (7/3/96)
Ascension Technology, Inc. (7/10/96)
Barnstable County Commissioners (7/8 and 8/5/96)
Business for Social Responsibility Education Fund (5/28/96)
Citizen Action (7/2/96)
Citizens Urging Responsible Energy (8/5 and 8/15/96)
City of Boston (5/28/96)
Colonial Bed & Breakfast (4/16/96)
Coon, Third Assistant Minority Leader Gary M. (7/16/96)
Design of Auction (6/19/96)
Eastern Power Distribution, Inc. (5/28 and 6/28/96)
Franklin County Commission (10/24/96)
Gallien, John (7/30/96)
Greater New Bedford NoCoalition (8/26/96)
Harris, Annie C. (7/30/96)
HG Sogdoff (8/14/96)
IRATE (5/28 and 8/12/96)
Kolb, JoAnne & Karl (7/24/96)
Levesque, Herb (11/6/96)
Lowell City Hall (10/30)
Massachusetts Department of Environmental Protection (6/5/96)
Massachusetts Food Association Letter (8/12/96)
McLaughlin, Jeanne (6/18/96)
Melconian, Senator Linda J. (10/8/96)
MRW Association (7/31/96)
New England Electric System (7/15/96)
New England Power Pool (7/16/96)
New England Power Service (10/21/96)
PJA Energy Systems Design (7/3/96)
PJA Energy System Design (7/3/96)
Rossi, Robert (7/30/96)
Shire, Thomas J. (7/10/96)
Southeast Regional Services Group (8/5/96)
State of Utah (7/15/96)

Stone Solar & Wind Power Company (7/22/96)
Stouffer, John (7/10/96)
Sylvia, L. (7/15/96)
Town of Orleans (8/14/96)
University of Massachusetts (7/19/96)
Urban Solar Initiative (6/4/96)
Varian Ion Implant Systems (4/16/96)
Wheeled Electric Power Company (5/10/96 and 6/4/96)
Zucker, Barbara & Seth (8/6/96)

APPENDIX F

220 CMR 12.00 STANDARDS OF CONDUCT FOR DISTRIBUTION COMPANIES AND THEIR COMPETITIVE AFFILIATES [FROM D.P.U. 96-44]

Section

- 12.01 Purpose and Scope
- 12.02 Definitions
- 12.03 Standards of Conduct

12.01: Purpose and Scope

- (1) Purpose. 220 C.M.R. 12.00 sets forth the Standards of Conduct governing the relationship between a Distribution Company and its unregulated Competitive Affiliate transacting business in Massachusetts.
- (2) Scope. 220 C.M.R. 12.00 applies to all Distribution Companies and their Competitive Affiliates. 220 C.M.R. 12.00 is not intended to supersede existing applicable law and regulations.

12.02: Definitions

- (1) Antitrust Laws are federal and state statutes, including the Sherman Act, 15 U.S.C. §§ 1-7, the Clayton Act, 15 U.S.C. §§ 12-27, and the Massachusetts Antitrust Act, G.L. c. 93, §§ 1-14A, which were designed to protect trade and commerce from unlawful restraints, undue price discrimination, certain forms of concerted behavior such as price fixing, and monopolization.
- (2) Competitive Affiliate refers to (i) any "affiliated company," as defined in G.L. c. 164, § 85, or (ii) any unit or division within a Distribution Company or its parent, or (iii) any separate legal entity either owned or subject to the common control of the Distribution Company or its parent, and such affiliate company, unit or division, or separate legal entity engages in the selling or marketing of natural gas, electricity, or related services on a competitive basis, including, but not limited to, natural gas or electric supply or capacity, and demand-side management.
- (3) Department refers to the Department of Public Utilities.
- (4) Distribution Company refers to a natural gas local distribution company or electric company that provides distribution services under the jurisdiction of the Department.

- (5) Employee refers to an officer, director, employee or agent who has specific knowledge of, or direct access to, information not otherwise available to Non-affiliated Suppliers that could provide a Competitive Affiliate with an undue advantage.
- (6) Non-affiliated Supplier refers to any entity, including aggregators, engaged in marketing, brokering or selling natural gas, electricity, or related services to retail customers where such product or service is also provided by a Competitive Affiliate.

12.03: Standards of Conduct.

- (1) A Distribution Company shall apply tariff provisions in the same manner to the same or similarly situated entities if there is discretion in the application of the provision.
- (2) A Distribution Company shall strictly enforce tariff provisions for which there is no discretion in the application of the provision.
- (3) A Distribution Company shall not, through a tariff provision or otherwise, give its Competitive Affiliate or customers of its Competitive Affiliate preference over Non-affiliated Suppliers or customers in matters relating to any product or service.
- (4) If a Distribution Company provides its Competitive Affiliate, or customer of its Competitive Affiliate, any product or service other than general and administrative support services, it shall make the same products or services available to all Non-affiliated Suppliers or customers on a non-discriminatory basis.
- (5) A Distribution Company shall not offer or sell electricity or natural gas commodity or capacity to its Competitive Affiliate without simultaneously posting the offering electronically on a source generally available to the market or otherwise making a sufficient offering to the market.
- (6) If a Distribution Company offers its Competitive Affiliate, or a customer of its Competitive Affiliate, a discount, rebate or fee waiver for any product or service, it shall make the same available on a non-discriminatory basis to all Non-affiliated Suppliers or customers.
- (7) A Distribution Company shall process all similar requests for a product or service on a non-discriminatory basis.

- (8) A Distribution Company shall not condition or tie the provision of any product, service or price agreement by the Distribution Company to the provision of any product or service by its Competitive Affiliate.
- (9) A Distribution Company shall not release any proprietary customer information without the prior written authorization of the customer. Initial voice authorization will satisfy this requirement where the Distribution Company obtains subsequent written confirmation within thirty (30) days.
- (10) To the extent that a Distribution Company provides a Competitive Affiliate with information not readily available or generally known to any other marketer or supplier, the Distribution Company shall make that information available on a non-discriminatory basis to all Non-affiliated Suppliers transacting business in its service territory. This provision does not apply to customer-specific information obtained with proper authorization, information necessary to fulfill the provisions of a contract, or information relating to the provision of general and administrative support services.
- (11) A Distribution Company shall refrain from giving any appearance of speaking on behalf of its Competitive Affiliate in any and all contacts or communications with customers or potential customers. The Distribution Company shall not represent that any advantage accrues to customers or others in the use of the Distribution Company's services as a result of that customer or others dealing with the Competitive Affiliate. The Distribution Company shall not engage in joint advertising or marketing programs of any sort with its Competitive Affiliate, nor shall the Distribution Company promote or market any product or service offered by its Competitive Affiliate.
- (12) If a customer requests information about Non-affiliated Suppliers, the Distribution Company shall provide a current list of all Non-affiliated Suppliers operating on the system or registered with the Department, including its Competitive Affiliate, but shall not promote its affiliate. The list of Non-affiliated Suppliers shall be in random sequence, and not in alphabetical order. The list shall be updated every sixty (60) days to allow for a change in the random sequence.
- (13) Employees of a Distribution Company shall not be shared with a Competitive Affiliate, and shall be physically separated from those of the Competitive Affiliate. The Distribution Company shall fully and transparently allocate costs for any shared facilities or general and administrative support services provided to the Competitive Affiliate.

- (14) A Distribution Company and its Competitive Affiliate shall keep separate books of accounts and records which shall be subject to review by the Department in accordance with the provisions of G.L. c. 164, § 85.
- (15) The Department may approve an exemption from the separation requirements of 220 C.M.R. 12.03(13) upon a showing by the Distribution Company that shared employees or facilities would be in the best interests of the ratepayers and have minimal anticompetitive effect, and that the costs can be fully and accurately allocated between the Distribution Company and its Competitive Affiliate. Such exemption shall be valid until such time that the Department determines that modification or removal of the exemption is necessary.
- (16) A Distribution Company shall establish and file with the Department a dispute resolution procedure to address complaints alleging violations of 220 C.M.R. 12.00. Such procedure, at a minimum, shall designate a person to conduct an investigation of the complaint and communicate the results of the investigation to the claimant in writing within 30 days after the complaint was received, including a description of any action taken and the complainant's option to complain to the Department if not satisfied with the results of the investigation.
- (17) A Distribution Company shall maintain a log of all new, resolved and pending complaints alleging violations of 220 C.M.R. 12.00. The log shall be subject to review by the Department and shall include, at a minimum, the written statement of the complaint and the resolution of the complaint, or the reason why the complaint is still pending.
- (18) Any wanton or willful violations of 220 C.M.R. 12.00 shall result in a penalty that reflects the actual or potential injury to ratepayers and the gravity of the violation.
- (19) Nothing in 220 C.M.R. 12.00 shall be construed to confer immunity from state and federal Antitrust Laws. Sanctions for violation of 220 C.M.R. 12.00 do not affect or pre-empt antitrust liability but rather are in addition to any antitrust liability that may apply to the activity.
- (20) Notwithstanding any other provisions in 220 C.M.R. 12.00, in emergency circumstances, a Distribution Company shall take any actions necessary to ensure public safety and system reliability. A Distribution Company shall maintain a log of all such actions, subject to review by the Department.

REGULATORY AUTHORITY

220 CMR 12.00: M.G.L. c. 164, §§ 76A, 76C, 85, 85A, 94A, 94B, 94C

APPENDIX G
CONSUMER EDUCATION ADVISORY TASK FORCE ("CEATF") REPORT

In order to advise the Department on how to ensure public education and opportunities for public input throughout the electric restructuring process, the Department in March 1996, established the Consumer Education Advisory Task Force ("Task Force") coordinated by Claudine Langlois, Director of the Consumer Division. See D.P.U. 96-100 Order Commencing Notice of Inquiry ("NOI") Rulemaking and Setting A Procedural Schedule at 7 (March 15, 1996).

The Department stated that anyone interested in participating in the Task Force should contact Ms. Langlois. Id. Fifty-three people responded to the invitation to participate. The Task Force currently includes Department staff; representatives from the Office of the Attorney General, Department of Energy Resources (DOER) and Department of Environmental Protection (DEP); legislative staff; investor-owned electric and gas companies; municipal light departments; energy consultants; manufacturing representatives; private law firms; public interest law centers; electricity suppliers; alternative energy suppliers; consumer advocacy groups; as well as interested consumers.

On May 22, 1996, the Task Force convened for the first time at the offices of the Department. At this meeting the Task Force established goals and discussed a proposed consumer information brochure. The Task Force identified as its goals the preparation and dissemination of adequate and sufficient information to advance informed consumer decision-making on the choices likely to result from electric industry restructuring, and to

publicize the evening meetings conducted by the Department to receive public comment. To achieve these goals, the Task Force met monthly at the Department and other central locations.

Additionally, members of the Task Force divided into small subgroups, each chaired by Department staff, to focus on specific issues related to the development and dissemination of consumer-friendly information on electric restructuring, and the publicizing of Department public meetings. Comments and suggestions were received from the Task Force regarding a proposed consumer information brochure which described the changes likely to result from the proposed restructuring of the electric industry in Massachusetts and which identified the public meetings conducted by the Department in communities across the Commonwealth. Many of the suggestions offered by the Task Force, including key questions that consumers would ask about electric restructuring, were incorporated into the final brochure that was distributed to the customers of each investor-owned electric company with the June 1996 monthly bills. See Attachment 1.

For the purposes of increasing public awareness and attendance at the public meetings, the Task Force subgroup on public service announcements drafted and released two public service announcements highlighting the locations and times of the public meetings on electric industry restructuring conducted by the Department. See Attachment 2. The public service announcements were sent to twenty-seven radio stations, eleven local access television stations, eight cable stations and eight network television stations. The cable TV Task Force subgroup arranged for the taping of the public meetings in Boston, Springfield, Worcester, New Bedford, Lowell and Marstons Mills.

Since August 1996, the Department has maintained an Internet home page at <http://www.magnet.state.us/dpu/>. The Internet communications subgroup of the Task Force added current information on electric industry restructuring to the Department's home page, including a listing of the times and locations of the public meetings.

The press release subgroup of the Task Force prepared two press releases for publication in the major newspapers in the Commonwealth. The press releases announced the public meetings and also provided basic information on the changes likely to result from electric industry restructuring. Additionally, the Task Force prepared letters which were sent to city and town officials and forty municipal light department managers announcing the public meetings and requesting these municipal officials to inform their communities of these meetings. The Task Force sent municipal light department managers copies of the electric industry restructuring brochures.

The Task Force's speakers forum subgroup has access to speakers from the Department who have been available to address many groups on the subject of electric industry restructuring. For well over a year, the Chairman, Commissioners and staff of the Department have made numerous presentations on electric restructuring, speaking to legislators, government officials, trade meetings, college classes, electric company personnel and representatives of community groups.

The Task Force has also prepared a glossary of terms. The purpose of the glossary is to provide consumers with simplified definitions of the terms that will be used in a competitive environment by electric companies and suppliers. The glossary was introduced to consumers at

the public meeting conducted by the Department on October 8, 1996. The glossary will be issued upon completion.

The Task Force will continue to participate in the development and dissemination of consumer information during the transition to a competitive electric industry. Future activities of the Task Force may include the development of a generic bill format for use by all investor-owned electric companies, as well as the design of a new brochure describing the Department's model rules. The Task Force will continue to promote consumer education so that consumers will be prepared to make intelligent choices in 1998.

APPENDIX H ABBREVIATIONS AND ACRONYMS

AIM	Associated Industries of Massachusetts
APS	Alternate Power Source, Inc.
BBB	Better Business Bureau
BECo	Boston Edison Company
BFI	Browning-Ferris Industries
CEQ	Council on Environmental Quality
CFR	Code of Federal Regulations
CLF	Conservation Law Foundation
CMR	Code of Massachusetts Regulations
COM/Electric	Commonwealth Electric Company and Cambridge Electric Light Company
CPC	Competitive Power Coalition of New England
CRS	Criteria, Rules, and Standards
DEP	Massachusetts Department of Environmental Protection
Department	Massachusetts Department of Public Utilities ("DPU")
DOE	United States Department of Energy
DOER	Massachusetts Division of Energy Resources
DPU	Massachusetts Department of Public Utilities
DSM	demand-side management
ECS	Energy Conservation Service
EEDCo	Eastern Edison Company
EPA	United States Environmental Protection Agency
FCC	United States Federal Communication Commission
FERC	United States Federal Energy Regulatory Commission
FG&E	Fitchburg Gas & Electric Light Company
Fitchburg	Fitchburg Gas & Electric Light Company
GCC	Grand Council of the Crees
G.L.	General Laws of Massachusetts
IEC	Intercontinental Energy Corporation
IOUs	investor-owned utilities
ISO	independent system operator
IPPs	independent power producers
IWSA	Integrated Waste Services Association
KWH	kilowatthour
LBR	lost base revenue
LEC	local exchange carrier
Local 464	Local 464, Utility Workers Union of America, AFL-CIO and Utility Workers Union of America, AFL-CIO
MassPIRG	Massachusetts Public Interest Research Group
MAUU	Massachusetts Alliance of Utility Unions
MECo	Massachusetts Electric Company

MEEC	Massachusetts Energy Efficiency Council
MEPA	Massachusetts Environmental Protection Act
MMLP	Massachusetts Municipal Light Plants
MMWEC	Massachusetts Municipal Wholesale Electric Company
MOC	Massachusetts Oilheat Council
MOU	memorandum of understanding
NARUC	National Association of Regulatory Utility Commissioners
NCLC	National Consumer Law Center
NECPUC	New England Conference of Public Utility Commissioners
NEES	New England Electric System
NEPOOL	New England Power Pool
NERC	North American Electric Reliability Council
NOI	[March 15, 1996] Notice of Inquiry/Order Opening the Restructuring Investigation in D.P.U. 96-100
NO _x	nitrogen oxides
NPCC	Northeast Power Coordinating Council
NRC	United States Nuclear Regulatory Commission
NUGs	non-utility generators
OTAG	Ozone Transport Assessment Group
OTC	Ozone Transport Commission
PBR	performance-based regulation
PE	power exchange
PPAs	purchase power agreements
PPU	pool planned unit
PSNH	Public Service Company of New Hampshire
PTF	pool transmission facility
PUCs	public utility commissions
PUHCA	Public Utility Holding Company Act
PURPA	Public Utilities Regulatory Policies Act of 1978
PV	present value
QFs	qualifying facilities
RAM	Retailers Association of Massachusetts
RFP	request for proposals
RPS	renewables portfolio standard
S&L	savings and loan companies
SEC	United States Securities and Exchange Commission
SJC	Supreme Judicial Court of Massachusetts
SO ₂	sulfur dioxide
T&D	transmission and distribution
Task Force	Consumer Education Advisory Task Force
TEC	The Energy Consortium
UCS	Union of Concerned Scientists
USC	United States Code

WAP	weatherization assistance program
WEPCo	Wheeled Electric Power Company
WMECo	Western Massachusetts Electric Company
WMECICG	Western Massachusetts Electric Company Industrial Consumer Group

APPENDIX I
D.P.U. 96-100 ORDER SETTING A PROCEDURAL SCHEDULE

D.P.U. 96-100

Investigation by the Department of Public Utilities upon its own motion commencing a Notice of Inquiry/Rulemaking, pursuant to 220 C.M.R. §§ 2.00 et seq., establishing the procedures to be followed in electric industry restructuring by electric companies subject to G.L. c. 164.

ORDER SETTING A PROCEDURAL SCHEDULE

I. INTRODUCTION

On December 30, 1996, the Department of Public Utilities ("Department") issued its Model Rules and Legislative Proposal in the Notice of Inquiry ("NOI")/Rulemaking proceeding regarding electric industry restructuring. Pursuant to the Notice of Change to the March 15, 1996 Order setting a procedural schedule, dated August 9, 1996, the Department hereby establishes a revised procedural schedule for electric companies' filings consistent with directives contained in the December 30, 1996 Model Rules and Legislative Proposal.

In the December 30, 1996 document, the Department found that introducing competition to the industry requires, as a necessary first step, that the different services that constitute electric service be made explicit to customers, and that consumers be exposed to separate pricing of those services. Therefore, the Department directs all of the electric companies to develop revenue-neutral unbundled rates and hereby sets a schedule for the filing and implementation of those rates. Each electric company shall, by March 3, 1997, submit for Department review unbundled rates for implementation during 1997. Because the primary purpose of unbundling rates during 1997 is informational, rate unbundling should be accomplished in a manner that is revenue-neutral not only for the company as a whole, but also for each rate class.²⁰⁶ Companies should unbundle rates based on the FERC Uniform System of Accounts.²⁰⁷

II. ORDER

206 This requires that, for each rate class, when the unbundled charges (customer, kilowatthour, and kilowatt) are summed, the total must equal that for the bundled charges currently in effect.

207 We note that, by March 3, 1997, some electric companies may have reached agreement with the Department regarding the delineation of transmission and distribution facilities using the seven criteria outlined by the Federal Energy Regulatory Commission's Order 888. In this circumstance, the distribution portion of the unbundled transmission and distribution rates shall reflect current distribution assets and rates consistent with such agreement.

Accordingly, after due notice, hearing, and consideration, it is

ORDERED: That all electric companies file for review with the Department unbundled rates pursuant to the directives in Section XII of the December 30, 1996 Model Rules and Legislative Proposal by March 3, 1997, such rates to be established by the Department between April and June, 1997; and

FURTHER ORDERED: That all electric companies file with the Department classifications of their distribution facilities based on an application of FERC's seven-part transmission/distribution test by March 3, 1997.

By Order of the Department,

/s/ John B. Howe
John B. Howe, Chairman

/s/ Janet Gail Besser
Janet Gail Besser, Commissioner